# 分 冊

Separate Volume

出願番号　　　特願２００３−１０２２０７

［ST.10/C］：　［ＪＰ２００３−１０２２０７］

分冊番号　　　５／９

出証番号　出証特：２００４−３０５９６６１

Leu Val Gly Ile Gly Pro Arg Ala Pro Pro Gly Arg Val Gly Leu Gln
              20                  25                  30
Pro Ser Gly Arg Leu Asp Arg Arg Gly Gly Ala Gly Thr Met Gly Tyr
              35                  40                  45
Lys Asp Asn Asp Gly Glu Glu Glu Arg Glu Gly Gly Ala Ala Gly
          50                  55                  60
Pro Arg Gly Ser Arg Leu Pro Pro Ile Thr Gly Gly Ala Ser Glu Leu
65                  70                  75                  80
Ala Lys Arg Lys Val Lys Lys Lys Arg Lys Lys Lys Thr Lys Gly
                  85                  90                  95
Ser Gly Lys Gly Asp Asp Lys His Gln Ser Gln Ser Leu Lys Ser Gln
                  100                 105                 110
Pro Leu Ser Ser Ser Phe His Asp Ile Leu Ser Pro Cys Lys Glu Arg
              115                 120                 125
Gly Pro Lys Pro Glu His Arg Gln Ser Lys Val Glu Lys Lys His Leu
          130                 135                 140
Pro Ser Asp Ser Ser Thr Val Ser Leu Pro Asp Phe Ala Glu Ile Glu
145                 150                 155                 160
Asn Leu Ala Asn Arg Ile Asn Glu Ser Leu Arg Trp Asp Gly Ile Leu
                  165                 170                 175
Ala Asp Pro Glu Ala Glu Lys Glu Arg Ile Arg Ile Tyr Lys Leu Asn
              180                 185                 190
Arg Arg Lys Arg Tyr Arg Cys Leu Ala Leu Lys Gly Phe His Pro Asp
          195                 200                 205
Pro Glu Ala Leu Lys Gly Phe His Pro Asp Pro Glu Ala Leu Lys Gly
          210                 215                 220
Phe His Pro Asp Pro Glu Ala Leu Lys Gly Phe His Pro Asp Pro Glu
225                 230                 235                 240
Ala Leu Lys Gly Phe His Pro Asp Pro Glu Ala Leu Lys Gly Phe His

```
                    245                250                255
Pro Asp Pro Glu Ala Leu Lys Gly Ile His Pro Asp Pro Glu Ala Leu
                260                265                270
Lys Gly Ile His Pro Asp Pro Glu Ala Leu Lys Gly Phe His Pro Asp
            275                280                285
Pro Glu Ala Leu Lys Gly Phe His Pro Asp Pro Glu Ala Leu Lys Gly
        290                295                300
Phe His Thr Asp Pro Glu Ala Leu Lys Gly Phe His Ile Asp Pro Glu
305                310                315                320
Ala Leu Lys Gly Phe His Pro Asp Pro Lys Ala Leu Lys Gly Phe His
                325                330                335
Pro Asp Pro Lys Ala Leu Lys Gly Phe His Thr Asp Pro Glu Ala Leu
                340                345                350
Lys Gly Phe His Pro Asp Pro Lys Ala Leu Lys Gly Phe His Pro Asp
            355                360                365
Pro Glu Ala Leu Lys Gly Phe His Pro Asp Pro Glu Ala Leu Lys Gly
        370                375                380
Phe His Pro Asp Pro Glu Ala Leu Lys Gly Phe His Thr Asp Pro Asn
385                390                395                400
Ala Glu Glu Ala Pro Glu Asn Leu Pro Tyr Leu Ser Asp Lys Asp Gly
                405                410                415
Ser Ser Ser His Arg Gln Pro Thr Ser Lys Ala Glu Cys Pro Asn Leu
                420                425                430
Cys Phe Glu Gly Asn Leu Thr Pro Lys Leu Leu His Ser Asp Leu Ala
            435                440                445
Pro Thr Leu Leu Glu
        450
```

<210> 3842

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3842

Met Gly Leu Gly Lys Lys Gly Asn Leu Val Tyr Ile Ile Asp Phe Gly
1               5                   10                  15

Leu Ala Lys Lys Tyr Arg Asp Ala Arg Thr His Gln His Ile Pro Tyr
                20                  25                  30

Arg Glu Asn Lys Asn Leu Thr Gly Thr Ala Arg Tyr Ala Ser Ile Asn
                35                  40                  45

Thr His Leu Gly Ile Glu Gln Ser Arg Arg Asp Asp Leu Glu Ser Leu
            50                  55                  60

Gly Tyr Val Leu Met Tyr Phe Asn Leu Gly Ser Leu Pro Trp Gln Gly
65                  70                  75                  80

Leu Lys Ala Ala Thr Lys Arg Gln Lys Tyr Glu Arg Ile Ser Glu Lys
                    85                  90                  95

Lys Met Ser Thr Pro Ile Glu Val Leu Cys Lys Gly Tyr Pro Ser Glu
                    100                 105                 110

Phe Ala Thr Tyr Leu Asn Phe Cys Arg Ser Leu Arg Phe Asp Asp Lys
            115                 120                 125

Pro Asp Tyr Ser Tyr Leu Arg Gln Leu Phe Arg Asn Leu Phe His Arg
            130                 135                 140

Gln Gly Phe Ser Tyr Asp Tyr Val Phe Asp Trp Asn Met Leu Lys Phe
145                 150                 155                 160

Gly Ala Ser Arg Ala Ala Asp Asp Ala Glu Arg Glu Arg Arg Asp Arg
                    165                 170                 175

Glu Glu Arg Leu Arg His Ser Arg Asn Pro Ala Thr Arg Gly Leu Pro

```
                180                    185                    190
Ser Thr Ala Ser Gly Arg Leu Arg Gly Thr Gln Glu Val Ala Pro Pro
            195                    200                    205
Thr Pro Leu Thr Pro Thr Ser His Thr Ala Asn Thr Ser Pro Arg Pro
        210                    215                    220
Val Ser Gly Met Glu Arg Glu Arg Lys Val Ser Met Arg Leu His Arg
225                    230                    235                    240
Gly Ala Pro Val Asn Ile Ser Ser Ser Asp Leu Thr Gly Arg Gln Asp
                245                    250                    255
Thr Ser Arg Met Ser Thr Ser Gln Asn Ser Ile Pro Phe Glu His His
                260                    265                    270
Gly Lys
```

<210> 3843

<211> 189

<212> PRT

<213> Homo sapiens


<400> 3843

```
Met Glu Val Pro Thr Ala Tyr Met Ile Ser Pro Lys Glu Arg Glu Lys
1               5                   10                  15
Ala Ser Asn Leu Lys Leu Ser Ser Arg Pro Pro Ala Thr Ser His Leu
            20                  25                  30
Ile Arg Thr Pro Lys Asp Thr His Tyr Cys Gly Ala Ser Lys Gly Leu
        35                  40                  45
Gly Asn Ser Phe Ile Gly Asn Glu Ser Phe Leu Pro Glu Phe Ile Asn
    50                  55                  60
```

●

```
Gly Asp Phe Asp Ser Ile Arg Pro Glu Val Arg Glu Tyr Tyr Ala Thr
65                  70                  75                  80
Lys Gly Cys Glu Leu Ile Ser Thr Pro Asp Gln Asp His Thr Asp Phe
                    85                  90                  95
Thr Lys Cys Leu Lys Met Leu Gln Lys Lys Ile Glu Glu Lys Asp Leu
                    100                 105                 110
Lys Gly Lys His Arg Leu His Val Asp Thr Gly Met Glu Gly Asp Trp
                    115                 120                 125
Cys Gly Leu Ile Pro Val Gly Gln Pro Cys Met Gln Val Thr Thr Thr
                    130                 135                 140
Gly Leu Lys Trp Asn Leu Thr Asn Asp Val Leu Ala Phe Gly Thr Leu
145                 150                 155                 160
Val Ser Thr Ser Asn Thr Tyr Asp Gly Ser Gly Val Val Thr Val Glu
                    165                 170                 175
Thr Asp His Pro Leu Leu Trp Thr Met Ala Ile Lys Ser
                    180                 185
```

```
<210> 3844
```

●

```
<211> 127

<212> PRT

<213> Homo sapiens
```

```
<400> 3844

Met Tyr Ser Asp Leu Gly Tyr Val Ile His Gly Arg Ile Asn Val Gln
1                   5                   10                  15
Phe Asn Asn Gly Glu His Gly Phe Asp Asn Lys Asp Met Asp Met Lys
                    20                  25                  30
Thr Ile Phe Arg Ala Val Gly Pro Ser Phe Arg Ala Gly Leu Glu Val
```

　　　　　　35　　　　　　　　　40　　　　　　　　　45

Glu Pro Phe Glu Ser Val His Val Tyr Glu Leu Met Cys Arg Leu Leu

　　　50　　　　　　　　　55　　　　　　　　60

Gly Ile Val Pro Glu Ala Asn Asp Gly His Leu Ala Thr Leu Leu Pro

65　　　　　　　　　70　　　　　　　　75　　　　　　　　80

Met Leu His Thr Glu Ser Ala Leu Pro Pro Asp Gly Arg Pro Thr Leu

　　　　　　　　　85　　　　　　　　90　　　　　　　　　95

Leu Pro Lys Gly Arg Ser Ala Leu Pro Pro Ser Ser Arg Pro Leu Leu

　　　　　　100　　　　　　　　105　　　　　　　　110

Val Met Gly Leu Leu Gly Thr Val Ile Leu Leu Ser Glu Val Ala

　　　115　　　　　　　　　120　　　　　　　　125



<210> 3845

<211> 279

<212> PRT

<213> Homo sapiens


<400> 3845

Met Gln Leu Gly Ser Ser Ser Pro Pro Pro Ala Cys Gly Val Gln Pro

1　　　　　　　　5　　　　　　　　　10　　　　　　　　　15

Pro Glu Thr Thr Arg Pro Glu Pro Pro Pro Leu Val Pro Pro Leu

　　　　　　20　　　　　　　　　25　　　　　　　　30

Pro Ala Gly Ser Leu Pro Pro Tyr Pro Pro Tyr Phe Glu Gly Ala Pro

　　　　　　35　　　　　　　　　40　　　　　　　　　45

Phe Pro His Pro Leu Trp Leu Arg Asp Thr Tyr Lys Leu Trp Val Pro

　　　50　　　　　　　　　55　　　　　　　　60

Gln Pro Pro Pro Arg Thr Ile Lys Arg Thr Arg Arg Arg Leu Ser Arg

65　　　　　　　　　70　　　　　　　　75　　　　　　　　80

Asn Arg Asp Pro Gly Arg Leu Ile Leu Ser Thr Ile Arg Leu Arg Pro
              85             90            95

Arg Gln Val Leu Cys Glu Lys Cys Lys Ser Thr Leu Ser Pro Pro Glu
          100         105         110

Ala Ser Pro Gly Pro Pro Ala Ala Pro Arg Ala Arg Arg Arg Leu Gly
          115         120         125

Ser Gly Pro Asp Arg Glu Leu Arg Lys Pro Glu Glu Pro Glu Asn Gly
          130         135         140

Glu Pro Thr Ala Ala Ala Thr Ala Arg Arg Ser Lys Arg Glu Arg Arg
145           150         155         160

Glu Glu Asp Arg Ala Pro Ala Glu Gln Val Pro Arg Ser Pro Val Ile
          165         170         175

Lys Ile Ser Tyr Ser Thr Pro Gln Gly Lys Gly Glu Val Val Lys Ile
          180         185         190

Pro Ser Arg Val His Gly Ser Leu Glu Pro Phe Arg Pro Gln Gln Ala
          195         200         205

Pro Gln Asp Asp Gly Ser Gln Asp Pro Glu Val Leu Asp Arg Glu Ser
          210         215         220

Arg Asp Arg Pro Ser Cys Ala Pro Ser Ala Ser Ile Pro Lys Leu Lys
225           230         235         240

Leu Thr Arg Pro Val Pro Ala Gly Ala Asp Leu Pro Pro Pro Lys Ile
          245         250         255

Arg Leu Lys Pro His Arg Leu Gly Thr Ala Ser Thr Ser Pro Cys Thr
          260         265         270

Gly Pro Ser Trp Trp Gly Ser
          275

<210> 3846

<211> 499

<212> PRT

<213> Homo sapiens


<400> 3846

Met Glu Leu Gly Leu Tyr Trp Val Phe Leu Val Ala Ile Leu Glu Gly
1               5                   10                  15

Val Gln Cys Glu Val Arg Leu Val Glu Ser Gly Gly Gly Phe Val Gln
            20                  25                  30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
            35                  40                  45

Ser Ala His Asn Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
        50                  55                  60

Glu Trp Ile Ser Lys Ile Ser Glu Asn Gly Asn Thr Ile Tyr Tyr Ala
65                  70                  75                  80

Asn Ser Val Arg Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Gln Asn
                85                  90                  95

Thr Leu Tyr Leu Gln Ile Asn Arg Pro Arg Glu Asp Asp Thr Ala Val
            100                 105                 110

Tyr Phe Cys Ala Arg Asp Ala Asp Val Ser Gly Ile Ser Val Phe Trp
        115                 120                 125

Phe Phe Asp Leu Trp Gly Arg Gly Thr Leu Val Asn Val Ser Thr Val
    130                 135                 140

Ser Ser Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys
145                 150                 155                 160

Ser Thr Gln Pro Asp Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly
                165                 170                 175

Phe Phe Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln
            180                 185                 190

Gly Val Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp
        195                200                205

Leu Tyr Thr Thr Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu
        210                215                220

Ala Gly Lys Ser Val Thr Cys His Val Lys His Tyr Thr Asn Pro Ser
225                230              235              240

Gln Asp Val Thr Val Pro Cys Pro Val Pro Ser Thr Pro Pro Thr Pro
        245                250              255

Ser Pro Ser Thr Pro Pro Thr Pro Ser Pro Ser Cys Cys His Pro Arg
        260                265              270

Leu Ser Leu His Arg Pro Ala Leu Glu Asp Leu Leu Leu Gly Ser Glu
        275                280              285

Ala Asn Leu Thr Cys Thr Leu Thr Gly Leu Arg Asp Ala Ser Gly Val
        290                295              300

Thr Phe Thr Trp Thr Pro Ser Ser Gly Lys Ser Ala Val Gln Gly Pro
305                310              315              320

Pro Glu Arg Asp Leu Cys Gly Cys Tyr Ser Val Ser Ser Val Leu Pro
        325                330              335

Gly Cys Ala Glu Pro Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala
        340                345              350

Ala Tyr Pro Glu Ser Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser
        355                360              365

Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu
        370                375              380

Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly
385                390              395              400

Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu
        405                410              415

Leu Pro Arg Glu Lys Tyr Leu Thr Trp Ala Ser Arg Gln Glu Pro Ser

```
                  420               425                430
Gln Gly Thr Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala
            435               440               445
Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu
            450               455               460
Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly
465               470               475               480
Lys Pro Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly
                  485               490               495
Thr Cys Tyr
```

<210> 3847

<211> 247

<212> PRT

<213> Homo sapiens


<400> 3847

```
Met Phe Gly Asp Tyr Asp Ser Phe Thr Glu Asn Ser Phe Ile Ala Gln
1               5                 10                15
Val Asp Asp Leu Glu Gln Lys Tyr Met Gln Leu Pro Glu His Lys Lys
                  20                25                30
His Ala Thr Asp Phe Ala Thr Glu Asn Leu Cys Ser Glu Ser Ile Lys
            35                40                45
Asn Lys Leu Ser Ile Thr Thr Ile Gly Asn Leu Thr Glu Leu Gln Thr
      50                55                60
Asp Lys His Thr Glu Asn Gln Ser Gly Tyr Glu Gly Val Thr Ile Glu
65                70                75                80
```

Pro Gly Ala Asp Leu Leu Tyr Asp Val Pro Ser Ser Gln Ala Ile Tyr
　　　　　　　　　　 85　　　　　　　　　　90　　　　　　　　　　95

Phe Glu Asn Leu Gln Asn Ser Ser Asn Asp Leu Gly Asp His Ser Met
　　　　　　　　　 100　　　　　　　　　105　　　　　　　　 110

Lys Glu Arg Asp Trp Lys Ser Ser Ser His Asn Thr Val Asn Glu Glu
　　　　　　　　　 115　　　　　　　　　120　　　　　　　　 125

Leu Pro His Asn Cys Ile Glu Gln Pro Gln Gln Asn Asp Glu Ser Ser
　　　　　　　　　 130　　　　　　　　　135　　　　　　　　 140

Ser Lys Val Arg Thr Ser Ser Asp Met Asn Arg Arg Lys Ser Ile Lys
145　　　　　　　　　150　　　　　　　　　155　　　　　　　　 160

Asp His Leu Lys Asn Ala Met Thr Gly Asn Ala Lys Ala Gln Thr Pro
　　　　　　　　　 165　　　　　　　　　170　　　　　　　　 175

Ile Phe Ser Arg Ser Lys Gln Leu Lys Asp Thr Leu Leu Ser Glu Glu
　　　　　　　　　 180　　　　　　　　　185　　　　　　　　 190

Ile Asn Val Ala Lys Lys Thr Ile Glu Ser Ser Ser Asn Asp Leu Gly
　　　　　　　　　 195　　　　　　　　　200　　　　　　　　 205

Pro Phe Tyr Ser Leu Pro Ser Lys Val Arg Asp Leu Tyr Ala Gln Phe
　　　　　　　　　 210　　　　　　　　　215　　　　　　　　 220

Lys Gly Ile Glu Lys Leu Tyr Gly Asn Ala Phe Cys Trp Asn Lys Lys
225　　　　　　　　　230　　　　　　　　　235　　　　　　　　 240

Ile Phe Phe Leu Ser Leu Pro
　　　　　　　　　 245

<210> 3848

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3848

```
Met Pro Pro Ser Glu Arg Val Leu His Gly Thr Glu Glu Met Phe Thr
1               5                   10                  15

Gly Ser Ser Gln Leu Pro Leu Leu Arg Ala Tyr His Pro Leu Ser Thr
                20                  25                  30

Gln Glu Pro Met Thr Ile Arg Lys Gln Asn Gly Ser Cys Pro Ser Thr
                35                  40                  45

Ser Cys Pro Leu Trp Val Trp Leu Cys His Pro Ser Trp Ser Ala Val
            50                  55                  60

Ala Arg Pro Arg Leu Ala Ala Ala Ser Ala Ser Trp Ala Gln Val Ile
65                  70                  75                  80

Leu Pro Pro Gln Leu Pro Lys Lys Gly Trp Leu Arg Val Ile Gln Ala
                85                  90                  95

Val Thr Trp Tyr His Gly Leu Arg Val Ala Arg Ser Ser Gly Gly Glu
                100                 105                 110

Leu Asp His Val Arg Ser Pro Val Gly Arg Glu Leu Pro Arg Asp Asn
                115                 120                 125

Ile Arg Thr Leu Gln Gly Pro Leu Pro Arg Pro Leu Arg Val Leu Gln
                130                 135                 140

Pro Gly Cys Asp Thr Ser Lys Ser Ala Asn Glu Ala Asn Leu Cys Lys
145                 150                 155                 160

Glu Arg Met Thr Phe Ala Gly
                165
```

<210> 3849

<211> 292

<212> PRT

<213> Homo sapiens

<400> 3849

```
Met Glu Glu Glu Leu Gly Ala Cys Leu Val Leu Gly His Gly Gly Ala
1               5                  10                  15
Gly Ala Cys Asp Cys Val Cys Arg Gly Ser Ala Pro Arg Ala Arg Glu
                20                  25                  30
Arg Gly Cys Ala Ala Pro Ser Glu Ser Pro Gly Ala Pro Ser Leu Leu
                35                  40                  45
Gln Pro Pro Arg Ala Pro His Phe Gly Pro Phe Ser Ser Pro Leu Leu
             50                  55                  60
Trp Ala Gln Pro Pro Ser Ser Thr Leu Trp Ala Glu Ser Thr Gly Ala
65                  70                  75                  80
Gln Glu Thr Ser Ala Ser Ala Ala His Leu Ala Phe Ala Val Phe Leu
                   85                  90                  95
Ser Arg Val Leu Phe Gln His Gly Leu Phe Cys Cys Asp Ser Ala Val
                100                 105                 110
Val Gly Ala Lys Phe Gly Cys Val Arg Pro Gly Arg Cys Val Val Phe
                115                 120                 125
Ser Arg Lys Arg Glu Thr Gln Arg Gly Ser Pro Gly Thr Arg Thr Gln
                130                 135                 140
Leu Thr Asn Arg Ser Gln Thr Thr Asn Ser Val Pro Trp Pro Leu Val
145                 150                 155                 160
Thr Gly Asp Arg Glu Gly Arg Lys Arg Gly Gln Leu Pro Pro Asp His
                165                 170                 175
Arg Arg Thr Gln Val Gly Arg Pro Thr Gly Leu Gly Leu Gly Ala Ala
                180                 185                 190
Gly Ala Gly Ala Thr Val Gln Pro Asp Ala Pro Leu Leu Gly Gln Glu
                195                 200                 205
Val Pro Ser Val Cys His Glu Gln Gly His Leu Gly Gly Pro Ser Ile
```

```
          210                215                220
Gly Pro Gln Glu Leu Pro Glu Gln Pro Gln Gln Pro Gln Pro Leu Asp
225                230                235                240
Leu Val Gln His His Ala Pro Val Pro Gly Arg Gln Thr Glu Glu Ser
               245                250                255
His His Cys Ala Gly Glu Glu Ala Tyr Phe Asn Ser Val Leu Glu Val
               260                265                270
Met Ala Gly Glu Asp Ser Tyr Val Ile Ile Asn Ser Ser Leu Leu Arg
               275                280                285
Asn Arg Ser Asp
          290
```

<210> 3850

<211> 215

<212> PRT

<213> Homo sapiens

<400> 3850

```
Met Glu Lys Asn Pro Pro Asp Asp Thr Gly Pro Val His Val Pro Leu
  1                5                10                15
Gly His Ile Val Ala Asn Glu Lys Trp Arg Gly Ser Gln Leu Ala Gln
               20                25                30
Glu Met Gln Gly Lys Ile Lys Leu Ile Phe Glu Asp Gly Leu Thr Pro
               35                40                45
Asp Phe Tyr Leu Ser Asn Arg Cys Cys Ile Leu Tyr Val Thr Glu Ala
          50                55                60
Asp Leu Val Ala Gly Asn Gly Tyr Arg Lys Arg Leu Val Arg Val Arg
65                70                75                80
```

●

Asn Ser Asn Asn Leu Lys Gly Ile Val Val Val Glu Lys Thr Arg Met
                85                  90                  95

Ser Glu Gln Tyr Phe Pro Ala Leu Gln Lys Phe Thr Val Leu Asp Leu
                100                105                110

Gly Met Val Leu Leu Pro Val Ala Ser Gln Met Glu Ala Ser Cys Leu
                115                120                125

Val Ile Gln Leu Val Gln Glu Gln Thr Lys Glu Pro Ser Lys Asn Pro
        130                135                140

Leu Leu Gly Lys Lys Arg Ala Leu Leu Leu Ser Glu Pro Ser Leu Leu
145                150                155                160

Arg Thr Val Gln Gln Ile Pro Gly Val Gly Lys Val Lys Ala Pro Leu
                165                170                175

Leu Leu Gln Lys Phe Pro Ser Ile Gln Gln Leu Ser Asn Ala Ser Ile
                180                185                190

Gly Glu Leu Glu Gln Val Val Gly Gln Ala Val Ala Gln Gln Ile His
                195                200                205

Ala Phe Phe Thr Gln Pro Arg
        210                215

●

<210> 3851

<211> 163

<212> PRT

<213> Homo sapiens


<400> 3851

Met Leu Val Trp Ala Ser Pro Gly Gly Pro Arg Ser Cys Val Ala Leu
    1                5                  10                 15

Lys Glu Gly Leu Ala Pro Glu Asp Gln Leu Ser Pro Pro Pro Gly Gly

```
                20              25              30
Leu Tyr Leu Leu Arg Val Gln Ser Ser Gln Pro His Gly Leu Gly Pro
            35              40              45
Gly His Arg Asp Gln Ser Gln Lys Ser Ser Gln Gln Gln Ala Ala His
        50              55              60
Pro Pro Arg Ser Thr Leu Arg Arg Lys Pro Arg Met Cys Ser Pro Ser
    65              70              75              80
Arg Pro Trp Arg Pro Val Tyr Met Ala Leu Asn Phe Ser Val Phe Gln
                85              90              95
Asn Gly His Pro Lys Ala Ser Arg Thr Thr Ser Pro Val Pro Gly Asp
                100             105             110
Pro Arg Ser Pro Ser Pro Ser Leu Gly Ser Arg Glu Thr Ala Val Arg
            115             120             125
Cys Gln Ala Arg Gln Glu Ala Lys Val Lys Pro Lys Glu Arg Asn Gln
        130             135             140
Gly Glu Asn Lys Trp Phe Ser Gly Thr Ala Val Leu Asp Ile Phe Cys
145             150             155             160
Phe Asn His
```

<210> 3852

<211> 134

<212> PRT

<213> Homo sapiens


<400> 3852

```
Met Phe Asp Asn Gly Asn Phe Arg Arg Lys Arg Lys Arg Arg Ala Glu
1               5               10              15
```

Ala Ser Ala Ala Val Arg Ser Gly Ala Arg Ser Val Gly Gly Ala Glu
                20                  25                  30

Ala Pro Ala Leu Glu Pro Pro Ser Ala Ala Cys Leu Asp Leu Gln Ala
                35                  40                  45

Ser Pro Ser Pro Ser Ala Pro Glu Ala Ala Thr Cys Phe Ser Gly Phe
                50                  55                  60

Ala Ser Ala Met Ser Ala Leu Ala Gly Gly Leu Gly Thr Phe Pro Gly
65                  70                  75                  80

Gly Leu Ala Gly Asp Phe Ser Phe Gly Arg Arg Pro Pro Thr Val Ala
                85                  90                  95

Thr His Ala Pro Gln Thr Leu Asn Pro Ser Pro Gly Phe Ala Pro Gly
                100                 105                 110

His Gln Thr Ala Ala Ala Gly Phe Arg Leu Ser His Leu Leu Tyr Ser
                115                 120                 125

Arg Glu Gly Thr Glu Val
                130


<210> 3853

<211> 188

<212> PRT

<213> Homo sapiens


<400> 3853

Met Thr Ser Ser Gln His Thr His Thr His Ser Thr Pro Pro Gln Ile
1                   5                   10                  15

His Ser His Asp Asp His Ala Thr Ala Arg Pro Thr Gln Ala Gln Ser
                20                  25                  30

Arg Arg His Phe Phe Phe Phe Glu Met Glu Ser Cys Phe Val Thr Gln

```
              35                    40                    45
Thr Gly Met Glu Cys Ser Gly Thr Ile Ser Ala His Cys Lys Leu Cys
         50                    55                    60
Leu Leu Gly Ser Ser Tyr Ser Pro Ala Ser Ala Ser Arg Val Ala Gly
    65                    70                    75                    80
Ile Thr Gly Thr His His His Ala Gln Leu Ile Phe Val Phe Leu Val
                   85                    90                    95
Glu Thr Lys Phe His His Val Gly Gln Ala Gly Leu Gln Leu Leu Thr
                  100                   105                   110
Ser Gly Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Ile Gly
              115                   120                   125
Val Ser His Cys Ala Gln Ala Ser Leu Val Phe Val Phe Leu Val Glu
              130                   135                   140
Met Gly Phe His His Val Gly Gln Ala Gly Leu Lys Cys Pro Thr Ser
145                   150                   155                   160
Gly Asp Leu Pro Ala Ser Ala Ser Lys Ser Ala Gly Ile Thr Gly Val
                  165                   170                   175
Ser His Arg Ala Trp Ser Cys Pro Ser Phe Ser Ser
                  180                   185
```

<210> 3854

<211> 146

<212> PRT

<213> Homo sapiens


<400> 3854

```
Met Asp Tyr Val His Thr Lys Asn Leu Ile Tyr Gln Asp Val Lys Pro
  1                 5                    10                    15
```

Glu Asn Phe Leu Val Gly Arg Pro Gly Thr Lys Arg Gln His Ala Ile
     20     25     30

His Ile Ile Asp Leu Gly Leu Ala Lys Gly Tyr Thr Gly Leu Arg Thr
     35     40     45

Lys Lys His Ile Pro Cys Ser Gln His Lys Ser Leu Thr Gly Thr Ala
    50     55     60

Cys Tyr Met Ser Ile Asn Met His Leu Gly Lys Glu Gln Ser His Cys
65     70     75     80

Asn Asn Leu Glu Val Leu Gly His Met Phe Met Tyr Phe Leu Cys Ser
      85     90     95

Ser Leu Pro Trp Gln Gly Leu Lys Ala Asp Thr Ile Met Ser Gly Thr
     100    105    110

Glu Asp Arg Gly His Ile Ala Arg His Ala His Arg Ser Ala Leu Arg
     115    120    125

Glu Leu Pro Arg Gly Asp Gly Tyr Val Pro Ala Leu Arg Ala Ala Pro
     130    135    140

Gly Leu

145


<210> 3855

<211> 178

<212> PRT

<213> Homo sapiens


<400> 3855

Met Val Asn Val Pro Asp Ile Phe Ser His Asp Thr Gln Gly Leu Leu
 1     5     10     15

Arg Lys Lys Leu Ile Glu Ala Ser Phe Gln Lys Val Ile Leu Asp Gly

●

```
              20                    25                    30
Tyr Gly Ser Cys Gly Pro Gln Asn Leu Asn Leu Arg Lys Glu Trp Glu
              35                    40                    45
Ser Glu Gly Lys Cys Glu Gly His Asn Gly Tyr Tyr Asp Gly His Thr
         50                    55                    60
Lys Cys Lys Thr Thr Thr Tyr Asn Lys Asn Leu Thr Val Thr Gly Gly
    65                    70                    75                    80
Gln Lys His Glu Lys Thr Gln Phe Met Ser Val Ala Phe Ser Lys Pro
                   85                    90                    95
Cys Val Ser Val Ser Lys Cys Gln His Gln Phe Leu Lys Leu Thr Phe
              100                   105                   110
Ser Phe Lys Gly Asn Leu Asp Asn Pro Asn Ser Asp Leu Val His Val
         115                   120                   125
Ser Asn Asn His Leu Asn Gln Leu Lys Tyr Arg Thr Gly Val Asn Val
    130                   135                   140
Gln Ser Asn Ile Ser Glu Lys Glu Arg Phe Lys Asn Glu Glu Val Ile
145                   150                   155                   160
Ser Lys Tyr Asp Gln Phe Asp Gly Ser Leu Leu Lys Val Cys Phe Thr
                   165                   170                   175
```

●

Asn Lys

<210> 3856

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3856

Met Lys Ala Arg His Asp Gly Ser Arg Leu Arg Ser Arg His Phe Gly
1               5                   10                  15

Arg Pro Arg Arg Ala Asp His Leu Arg Ser Ser Arg Pro Ala Trp Pro
            20                  25                  30

Ile Trp Gly Ser Pro Val Ser Ala Arg Asn Ala Lys Ala Gly Arg Ser
            35                  40                  45

Trp Trp His Ala Pro Val Val Pro Ala Ala Arg Glu Ala Glu Ala Gly
        50                  55                  60

Glu Leu Leu Glu Pro Gly Arg Trp Arg Leu Arg Trp Ala Gly Thr Ala
65                  70                  75                  80

Pro Leu His Ser Arg Leu Gly Lys Arg Ala Arg Leu His Leu Asn Asn
                85                  90                  95

Asn Lys Lys Ser Ile Glu Val Ala Lys Tyr Tyr Trp Cys Ile Val Tyr
            100                 105                 110

Leu Pro Ser Asn Tyr Cys Ser Phe Tyr Phe Met Tyr Phe Glu Ala Leu
            115                 120                 125

Phe Phe Gly Ala Tyr Arg Leu Thr Asn Val Ile Ser Ser
            130                 135                 140


<210> 3857

<211> 189

<212> PRT

<213> Homo sapiens


<400> 3857

Met Val Gln Gly Ser Ser Arg Thr Ala Arg Pro Leu Ser Ala Pro Ala
1               5                   10                  15

Cys Gly Leu Ser Pro Gly Pro Asp Cys Asn Ala Ser Trp Gln Asp Arg

```
                20                   25                   30
Ala Ala Asp Phe Cys Pro Val Arg Ala Val Cys Lys Val Gly Pro Cys
                35                   40                   45
Pro Cys Cys Gln Leu Lys Thr Asp Pro Arg Leu Gly Lys Arg Thr Gly
                50                   55                   60
Leu Asp Leu Phe Ser Val Trp Ser Arg Ser Ala Met Leu Ala Pro Ala
    65                   70                   75                   80
Gly Ser Val Leu Ala Met Pro Thr Leu Arg Pro Pro Arg Asn Ser Val
                    85                   90                   95
Gly Asp Ser Gly Ala Cys Cys Leu Arg Thr Thr Gly Leu Asp Ile Ser
                    100                  105                  110
Lys Val Leu Pro Glu Ser Phe Leu Ser Cys Pro Leu Leu Glu Leu Pro
                115                  120                  125
Trp His Leu Ser Ser Trp Val Pro Asn Pro Gly Leu Pro Thr Leu Arg
                130                  135                  140
Thr Pro His Ala Ser Tyr Ser Cys Phe Ala Ala Gln Ala Arg Ser Pro
    145                  150                  155                  160
Glu Arg Ala Ala Gly Gly Ala Trp Pro Leu Thr Gly Lys Pro Trp Pro
                    165                  170                  175
Arg Thr Gly Ile Leu Ser Pro Ser His Ser Glu Ile Leu
                    180                  185
```

<210> 3858

<211> 121

<212> PRT

<213> Homo sapiens


<400> 3858

Met Ile Asp Ser Pro Arg Lys Glu Gly Ala Leu Ser Pro Pro Leu Gly
1               5                   10                  15

Gly Trp Arg Leu Gly Asp Arg Arg Cys Ala Gly Gly Lys Arg Thr Glu
            20                  25                  30

Arg Arg Thr Pro Glu Lys Leu Trp Gly Ile Arg Gly Glu Lys Glu Gly
            35                  40                  45

Val Lys Arg Glu Gly Arg Leu Ser Arg Gly Gly Gly Ala Gly Ala Gly
            50                  55                  60

Ala Gly Ala Gly Gly Val Thr Ala Pro Arg Pro Pro Leu Pro Ala Leu
            65                  70                  75                  80

His Ser Ala Ala Pro Gly Leu Pro Pro Pro Pro Pro Pro Pro Pro
                85                  90                  95

Pro Pro Pro Leu Pro Pro Pro Pro Gly Val Ala Gly Cys Gly Gln Asn
                100                 105                 110

Arg Ser Pro Asn Arg Ala Ala Gly Glu
            115                 120


<210> 3859

<211> 318

<212> PRT

<213> Homo sapiens


<400> 3859

Met Val Leu Ser Ser Gly Pro Gln Trp Cys Gly Ser Gln Glu Leu Trp
1               5                   10                  15

Phe Gly Lys Thr Cys Glu Glu Lys Ser Arg Leu Gly Arg Trp Pro Gly
            20                  25                  30

Tyr Leu Asn Gly Gly Arg Met Glu Ser Ser Thr Asn Asp Ile Ile Glu

```
              35                    40                    45
Val Ile Val Lys Asp Glu Met Ile Ser Val Glu Glu Ser Ser Gly Asn
      50                    55                    60
Thr Asp Val Asn Asn Leu Leu Gly Ile His His Lys Ile Leu Asn Glu
65                    70                    75                    80
Gln Ile Phe Tyr Ile Cys Glu Glu Cys Gly Lys Cys Phe Asp Gln Asn
                   85                    90                    95
Glu Asp Phe Asp Gln His Gln Lys Thr His Asn Gly Glu Lys Val Tyr
                   100                   105                   110
Gly Cys Lys Glu Cys Gly Lys Ala Phe Ser Phe Arg Ser His Cys Ile
         115                   120                   125
Ala His Gln Arg Ile His Ser Gly Val Lys Pro Tyr Glu Cys Gln Glu
         130                   135                   140
Cys Ala Lys Ala Phe Val Trp Lys Ser Asn Leu Ile Arg His Gln Arg
145                   150                   155                   160
Ile His Thr Gly Glu Lys Pro Phe Glu Cys Lys Glu Cys Gly Lys Gly
                   165                   170                   175
Phe Ser Gln Asn Thr Ser Leu Thr Gln His Gln Arg Ile His Thr Gly
                   180                   185                   190
Glu Lys Pro Tyr Thr Cys Lys Glu Cys Gly Lys Ser Phe Thr Arg Asn
         195                   200                   205
Pro Ala Leu Leu Arg His Gln Arg Met His Thr Gly Glu Lys Pro Tyr
210                   215                   220
Glu Cys Lys Asp Cys Gly Lys Gly Phe Met Trp Asn Ser Asp Leu Ser
225                   230                   235                   240
Gln His Gln Arg Val His Thr Gly Asp Lys Pro His Glu Cys Thr Asp
                   245                   250                   255
Cys Gly Lys Ser Phe Phe Cys Lys Ala His Leu Ile Arg His Gln Arg
         260                   265                   270
```

Ile His Thr Gly Glu Arg Pro Tyr Arg Cys Asn Asp Cys Gly Lys Ala
        275              280              285

Phe Ser Gln Asn Ser Val Leu Ile Lys His Gln Arg Arg His Ala Arg
    290              295              300

Asp Lys Pro Tyr Asn Cys Gln Ile Ser His Leu Leu Glu His
305              310              315


<210> 3860

<211> 1774

<212> PRT

<213> Homo sapiens


<400> 3860

Met Glu Ser Leu Glu Pro Ser Gly Ala Tyr Pro Pro Cys His Leu Ser
1           5              10              15

Pro Ala Lys Ser Thr Gly Ser Ile Asp Gln Leu Ser His Phe His Asn
            20              25              30

Lys Arg Asp Ser Ala Tyr Ser Ser Phe Ser Thr Ser Ser Ser Ile Leu
        35              40              45

Glu Tyr Pro His Pro Gly Ile Ser Ala Arg Glu Arg Ser Gly Ser Met
    50              55              60

Asp Asn Thr Ser Ala Arg Gly Gly Leu Leu Glu Gly Met Arg Gln Ala
65              70              75              80

Asp Ile Arg Tyr Val Lys Thr Val Tyr Asp Thr Arg Arg Gly Val Ser
            85              90              95

Ala Glu Tyr Glu Val Asn Ser Ser Ala Leu Leu Leu Gln Gly Arg Glu
            100             105             110

Ala Arg Ala Ser Ala Asn Gly Gln Gly Tyr Asp Lys Trp Ser Asn Ile

```
                115                    120                    125
Pro Arg Gly Lys Gly Val Pro Pro Pro Ser Trp Ser Gln Gln Cys Pro
                130                    135                    140
Ser Ser Leu Glu Thr Ala Thr Asp Asn Leu Pro Pro Lys Val Gly Ala
145                    150                    155                    160
Pro Leu Pro Pro Ala Arg Ser Asp Ser Tyr Ala Ala Phe Arg His Arg
                      165                    170                    175
Glu Arg Pro Ser Ser Trp Ser Ser Leu Asp Gln Lys Arg Leu Cys Arg
                      180                    185                    190
Pro Gln Ala Asn Ser Leu Gly Ser Leu Lys Ser Pro Phe Ile Glu Glu
                      195                    200                    205
Gln Leu His Thr Val Leu Glu Lys Ser Pro Glu Asn Ser Pro Pro Val
                210                    215                    220
Lys Pro Lys His Asn Tyr Thr Gln Lys Ala Gln Pro Gly Gln Pro Leu
225                    230                    235                    240
Leu Pro Thr Ser Ile Tyr Ala Val Pro Ser Leu Glu Pro His Phe Ala
                      245                    250                    255
Gln Val Pro Gln Pro Ser Val Ser Ser Asn Gly Met Leu Tyr Pro Ala
                      260                    265                    270
Leu Ala Lys Glu Ser Gly Tyr Ile Ala Pro Gln Gly Ala Cys Asn Lys
                      275                    280                    285
Met Ala Thr Ile Asp Glu Asn Gly Asn Gln Asn Gly Ser Gly Arg Pro
                290                    295                    300
Gly Phe Ala Phe Cys Gln Pro Leu Glu His Asp Leu Leu Ser Pro Val
305                    310                    315                    320
Glu Lys Lys Pro Glu Ala Thr Ala Lys Tyr Val Pro Ser Lys Val His
                      325                    330                    335
Phe Cys Ser Val Pro Glu Asn Glu Glu Asp Ala Ser Leu Lys Arg His
                      340                    345                    350
```

Leu Thr Pro Pro Gln Gly Asn Ser Pro His Ser Asn Glu Arg Lys Ser
            355                 360                 365

Thr His Ser Asn Lys Pro Ser Ser His Pro His Ser Leu Lys Cys Pro
            370                 375                 380

Gln Ala Gln Ala Trp Gln Ala Gly Glu Asp Lys Arg Ser Ser Arg Leu
385                 390                 395                 400

Ser Glu Pro Trp Glu Gly Asp Phe Gln Glu Asp His Asn Ala Asn Leu
                    405                 410                 415

Trp Arg Arg Leu Glu Arg Glu Gly Leu Gly Gln Ser Leu Ser Gly Asn
                    420                 425                 430

Phe Gly Lys Thr Lys Ser Ala Phe Ser Ser Leu Gln Asn Ile Pro Glu
            435                 440                 445

Ser Leu Arg Arg His Ser Ser Leu Glu Leu Gly Arg Gly Thr Gln Glu
            450                 455                 460

Gly Tyr Pro Gly Gly Arg Pro Thr Cys Ala Val Asn Thr Lys Ala Glu
465                 470                 475                 480

Asp Pro Gly Arg Lys Ala Ala Pro Asp Leu Gly Ser His Leu Asp Arg
                    485                 490                 495

Gln Val Ser Tyr Pro Arg Pro Glu Gly Arg Thr Gly Ala Ser Ala Ser
            500                 505                 510

Phe Asn Ser Thr Asp Pro Ser Pro Glu Glu Pro Pro Ala Pro Ser His
            515                 520                 525

Pro His Thr Ser Ser Leu Gly Arg Arg Gly Pro Gly Pro Gly Ser Ala
            530                 535                 540

Ser Ala Leu Gln Gly Phe Gln Tyr Gly Lys Pro His Cys Ser Val Leu
545                 550                 555                 560

Glu Lys Val Ser Lys Phe Glu Gln Arg Glu Gln Gly Ser Gln Arg Pro
                    565                 570                 575

Ser Val Gly Gly Ser Gly Phe Gly His Asn Tyr Arg Pro His Arg Thr

```
                580              585              590
Val Ser Thr Ser Ser Thr Ser Gly Asn Asp Phe Glu Glu Thr Lys Ala
        595              600              605
His Ile Arg Phe Ser Glu Ser Ala Glu Pro Leu Gly Asn Gly Glu Gln
        610              615              620
His Phe Lys Asn Gly Glu Leu Lys Leu Glu Glu Ala Ser Arg Gln Pro
625              630              635              640
Cys Gly Gln Gln Leu Ser Gly Gly Ala Ser Asp Ser Gly Arg Gly Pro
                645              650              655
Gln Arg Pro Asp Ala Arg Leu Leu Arg Ser Gln Ser Thr Phe Gln Leu
        660              665              670
Ser Ser Glu Pro Glu Arg Glu Pro Glu Trp Arg Asp Arg Pro Gly Ser
        675              680              685
Pro Glu Ser Pro Leu Leu Asp Ala Pro Phe Ser Arg Ala Tyr Arg Asn
        690              695              700
Ser Ile Lys Asp Ala Gln Ser Arg Val Leu Gly Ala Thr Ser Phe Arg
705              710              715              720
Arg Arg Asp Leu Glu Leu Gly Ala Pro Val Ala Ser Arg Ser Trp Arg
                725              730              735
Pro Arg Pro Ser Ser Ala His Val Gly Leu Arg Ser Pro Glu Ala Ser
                740              745              750
Ala Ser Ala Ser Pro His Thr Pro Arg Glu Arg His Ser Val Thr Pro
        755              760              765
Ala Glu Gly Asp Leu Ala Arg Pro Val Pro Pro Ala Ala Arg Arg Gly
        770              775              780
Ala Arg Arg Arg Leu Thr Pro Glu Gln Lys Lys Arg Ser Tyr Ser Glu
785              790              795              800
Pro Glu Lys Met Asn Glu Val Gly Ile Val Glu Glu Ala Glu Pro Ala
                805              810              815
```

Pro Leu Gly Pro Gln Arg Asn Gly Met Arg Phe Pro Glu Ser Ser Val
　　　　　　 820　　　　　　　　 825　　　　　　　　 830

Ala Asp Arg Arg Arg Leu Phe Glu Arg Asp Gly Lys Ala Cys Ser Thr
　　　　　　 835　　　　　　　　 840　　　　　　　　 845

Leu Ser Leu Ser Gly Pro Glu Leu Lys Gln Phe Gln Gln Ser Ala Leu
　　　　　　 850　　　　　　　　 855　　　　　　　　 860

Ala Asp Tyr Ile Gln Arg Lys Thr Gly Lys Arg Pro Thr Ser Ala Ala
865　　　　　　　　 870　　　　　　　　 875　　　　　　　　 880

Gly Cys Ser Leu Gln Glu Pro Gly Pro Leu Arg Glu Arg Ala Gln Ser
　　　　　　　　 885　　　　　　　　 890　　　　　　　　 895

Ala Tyr Leu Gln Pro Gly Pro Ala Ala Leu Glu Gly Ser Gly Leu Ala
　　　　　　 900　　　　　　　　 905　　　　　　　　 910

Ser Ala Ser Ser Leu Ser Ser Leu Arg Glu Pro Ser Leu Gln Pro Arg
　　　　　　 915　　　　　　　　 920　　　　　　　　 925

Arg Glu Ala Thr Leu Leu Pro Ala Thr Val Ala Glu Thr Gln Gln Ala
　　　　　　 930　　　　　　　　 935　　　　　　　　 940

Pro Arg Asp Arg Ser Ser Ser Phe Ala Gly Gly Arg Arg Leu Gly Glu
945　　　　　　　　 950　　　　　　　　 955　　　　　　　　 960

Arg Arg Arg Gly Asp Leu Leu Ser Gly Ala Asn Gly Gly Thr Arg Gly
　　　　　　　　 965　　　　　　　　 970　　　　　　　　 975

Thr Gln Arg Gly Asp Glu Thr Pro Arg Glu Pro Ser Ser Trp Gly Ala
　　　　　　 980　　　　　　　　 985　　　　　　　　 990

Arg Ala Gly Lys Ser Met Ser Ala Glu Asp Leu Leu Glu Arg Ser Asp
　　　　　　 995　　　　　　　　 1000　　　　　　　　 1005

Val Leu Ala Gly Pro Val His Val Arg Ser Arg Ser Ser Pro Ala Thr
　　　　　　 1010　　　　　　　　 1015　　　　　　　　 1020

Ala Asp Lys Arg Gln Asp Val Leu Leu Gly Gln Asp Ser Gly Phe Gly
1025　　　　　　　　 1030　　　　　　　　 1035　　　　　　　　 1040

Leu Val Lys Asp Pro Cys Tyr Leu Ala Gly Pro Gly Ser Arg Ser Leu

```
                 1045              1050              1055
Ser Cys Ser Glu Arg Gly Gln Glu Glu Met Leu Pro Leu Phe His His
            1060              1065              1070
Leu Thr Pro Arg Trp Gly Gly Ser Gly Cys Lys Ala Ile Gly Asp Ser
        1075              1080              1085
Ser Val Pro Ser Glu Cys Pro Gly Thr Leu Asp His Gln Arg Gln Ala
    1090              1095              1100
Ser Arg Thr Pro Cys Pro Arg Pro Pro Leu Ala Gly Thr Gln Gly Leu
1105              1110              1115              1120
Val Thr Asp Thr Arg Ala Ala Pro Leu Thr Pro Ile Gly Thr Pro Leu
            1125              1130              1135
Pro Ser Ala Ile Pro Ser Gly Tyr Cys Ser Gln Asp Gly Gln Thr Gly
        1140              1145              1150
Arg Gln Pro Leu Pro Pro Tyr Thr Pro Ala Met Met His Arg Ser Asn
        1155              1160              1165
Gly His Thr Leu Thr Gln Pro Pro Gly Pro Arg Gly Cys Glu Gly Asp
    1170              1175              1180
Gly Pro Glu His Gly Val Glu Glu Gly Thr Arg Lys Arg Val Ser Leu
1185              1190              1195              1200
Pro Gln Trp Pro Pro Pro Ser Arg Ala Lys Trp Ala His Ala Ala Arg
            1205              1210              1215
Glu Asp Ser Leu Pro Glu Glu Ser Ser Ala Pro Asp Phe Ala Asn Leu
        1220              1225              1230
Lys His Tyr Gln Lys Gln Gln Ser Leu Pro Ser Leu Cys Ser Thr Ser
        1235              1240              1245
Asp Pro Asp Thr Pro Leu Gly Ala Pro Ser Thr Pro Gly Arg Ile Ser
    1250              1255              1260
Leu Arg Ile Ser Glu Ser Val Leu Arg Asp Ser Pro Pro Pro His Glu
1265              1270              1275              1280
```

Asp Tyr Glu Asp Glu Val Phe Val Arg Asp Pro His Pro Lys Ala Thr
　　　　　　　　1285　　　　　　　　　1290　　　　　　　　　1295

Ser Ser Pro Thr Phe Glu Pro Leu Pro Pro Pro Pro Pro Pro Pro Pro
　　　　　　1300　　　　　　　　1305　　　　　　　1310

Ser Gln Glu Thr Pro Val Tyr Ser Met Asp Asp Phe Pro Pro Pro Pro
　　　　　　1315　　　　　　　　1320　　　　　　　1325

Pro His Thr Val Cys Glu Ala Gln Leu Asp Ser Glu Asp Pro Glu Gly
　　　　1330　　　　　　　　1335　　　　　　　　　1340

Pro Arg Pro Ser Phe Asn Lys Leu Ser Lys Val Thr Ile Ala Arg Glu
1345　　　　　　　1350　　　　　　　　1355　　　　　　　　　1360

Arg His Met Pro Gly Ala Ala His Val Val Gly Ser Gln Thr Leu Ala
　　　　　　　　1365　　　　　　　　1370　　　　　　　　1375

Ser Arg Leu Gln Thr Ser Ile Lys Gly Ser Glu Ala Glu Ser Thr Pro
　　　　　　　1380　　　　　　　　1385　　　　　　　　1390

Pro Ser Phe Met Ser Val His Ala Gln Leu Ala Gly Ser Leu Gly Gly
　　　　　　1395　　　　　　　　1400　　　　　　　1405

Gln Pro Ala Pro Ile Gln Thr Gln Ser Leu Ser His Asp Pro Val Ser
　　　　1410　　　　　　　　1415　　　　　　　　　1420

Gly Thr Gln Gly Leu Glu Lys Lys Val Ser Pro Asp Pro Gln Lys Ser
1425　　　　　　　1430　　　　　　　　1435　　　　　　　　1440

Ser Glu Asp Ile Arg Thr Glu Ala Leu Ala Lys Glu Ile Val His Gln
　　　　　　　　1445　　　　　　　　1450　　　　　　　　1455

Asp Lys Ser Leu Ala Asp Ile Leu Asp Pro Asp Ser Arg Leu Lys Thr
　　　　　　1460　　　　　　　　1465　　　　　　　1470

Thr Met Asp Leu Met Glu Gly Leu Phe Pro Arg Asp Val Asn Leu Leu
　　　　　　1475　　　　　　　　1480　　　　　　　1485

Lys Glu Asn Ser Val Lys Arg Lys Ala Ile Gln Arg Thr Val Ser Ser
　　　　1490　　　　　　　　1495　　　　　　　　1500

Ser Gly Cys Glu Gly Lys Arg Asn Glu Asp Lys Glu Ala Val Ser Met

●

```
1505                1510                1515                1520
Leu Val Asn Cys Pro Ala Tyr Tyr Ser Val Ser Ala Pro Lys Ala Glu
            1525                1530                1535
Leu Leu Asn Lys Ile Lys Glu Met Pro Ala Glu Val Asn Glu Glu Glu
         1540                1545                1550
Glu Gln Ala Asp Val Asn Glu Lys Lys Ala Glu Leu Ile Gly Ser Leu
            1555                1560                1565
Thr His Lys Leu Glu Thr Leu Gln Glu Ala Lys Gly Ser Leu Leu Thr
      1570                1575                1580
Asp Ile Lys Leu Asn Asn Ala Leu Gly Glu Glu Val Glu Ala Leu Ile
1585                1590                1595                1600
Ser Glu Leu Cys Lys Pro Asn Glu Phe Asp Lys Tyr Arg Met Phe Ile
               1605                1610                1615
Gly Asp Leu Asp Lys Val Val Asn Leu Leu Leu Ser Leu Ser Gly Arg
            1620                1625                1630
Leu Ala Arg Val Glu Asn Val Leu Ser Gly Leu Gly Glu Asp Ala Ser
         1635                1640                1645
Asn Glu Glu Arg Ser Ser Leu Tyr Glu Lys Arg Lys Ile Leu Ala Gly
         1650                1655                1660
Gln His Glu Asp Ala Arg Glu Leu Lys Glu Asn Leu Asp Arg Arg Glu
1665                1670                1675                1680
Arg Val Val Leu Gly Ile Leu Ala Asn Tyr Leu Ser Glu Glu Gln Leu
            1685                1690                1695
Gln Asp Tyr Gln His Phe Val Lys Met Lys Ser Thr Leu Leu Ile Glu
            1700                1705                1710
Gln Arg Lys Leu Asp Asp Lys Ile Lys Leu Gly Gln Glu Gln Val Lys
         1715                1720                1725
Cys Leu Leu Glu Ser Leu Pro Ser Asp Phe Ile Pro Lys Ala Gly Ala
            1730                1735                1740
```

Leu Ala Leu Pro Pro Asn Leu Thr Ser Glu Pro Ile Pro Ala Gly Gly
1745            1750            1755            1760
Cys Thr Phe Ser Gly Ile Phe Pro Thr Leu Thr Ser Pro Leu
                1765            1770


<210> 3861

<211> 780

<212> PRT

<213> Homo sapiens


<400> 3861

Met Asp Pro Gln Pro Leu Arg Gly Pro Ala Lys Ser Leu Val Gly Pro
1               5               10              15
Asn Leu Lys Glu Gly Ala Ala Ala Ala Val Val Leu Ala Pro Leu Ala
                20              25              30
Pro Arg Gly Ser Ser Gly Pro Cys Ser Pro His Ser Val Leu Thr Gln
                35              40              45
Arg Pro Arg Gln Lys Leu Ser Arg Lys Ala Ile Ser Ser Ala Asn Leu
50              55              60
Leu Val Arg Ser Gly Ser Thr Glu Ser Arg Gly Gly Lys Asp Pro Leu
65              70              75              80
Ser Ser Pro Gly Gly Pro Gly Ser Arg Arg Ser Asn Tyr Asn Leu Glu
                85              90              95
Gly Ile Ser Val Lys Met Phe Leu Arg Gly Arg Pro Ile Thr Met Tyr
                100             105             110
Ile Pro Ser Gly Ile Arg Ser Leu Glu Glu Leu Pro Ser Gly Pro Pro
                115             120             125
Pro Glu Thr Leu Ser Leu Asp Trp Val Tyr Gly Tyr Arg Gly Arg Asp

```
            130                 135                 140
Ser Arg Ser Asn Leu Phe Val Leu Arg Ser Gly Glu Val Val Tyr Phe
145                 150                 155                 160
Ile Ala Cys Val Val Val Leu Tyr Arg Pro Gly Gly Gly Pro Gly Gly
                    165                 170                 175
Pro Gly Gly Gly Gly Gln Arg His Tyr Arg Gly His Thr Asp Cys Val
                    180                 185                 190
Arg Cys Leu Ala Val His Pro Asp Gly Val Arg Val Ala Ser Gly Gln
                    195                 200                 205
Thr Ala Gly Val Asp Lys Asp Gly Lys Pro Leu Gln Pro Val Val His
            210                 215                 220
Ile Trp Asp Ser Glu Thr Leu Leu Lys Leu Gln Glu Ile Gly Leu Gly
225                 230                 235                 240
Ala Phe Glu Arg Gly Val Gly Ala Leu Ala Phe Ser Ala Ala Asp Gln
                    245                 250                 255
Gly Ala Phe Leu Cys Val Val Asp Asp Ser Asn Glu His Met Leu Ser
                    260                 265                 270
Val Trp Asp Cys Ser Arg Gly Met Lys Leu Ala Glu Ile Lys Ser Thr
                    275                 280                 285
Asn Asp Ser Val Leu Ala Val Gly Phe Asn Pro Arg Asp Ser Ser Cys
            290                 295                 300
Ile Val Thr Ser Gly Lys Ser His Val His Phe Trp Asn Trp Ser Gly
305                 310                 315                 320
Gly Val Gly Val Pro Gly Asn Gly Thr Leu Thr Arg Lys Gln Gly Val
                    325                 330                 335
Phe Gly Lys Tyr Lys Lys Pro Lys Phe Ile Pro Cys Phe Val Phe Leu
                    340                 345                 350
Pro Asp Gly Asp Ile Leu Thr Gly Asp Ser Glu Gly Asn Ile Leu Thr
            355                 360                 365
```

Trp Gly Arg Ser Pro Ser Asp Ser Lys Thr Pro Gly Arg Gly Gly Ala
370             375             380

Lys Glu Thr Tyr Gly Ile Val Ala Gln Ala His Ala His Glu Gly Ser
385             390             395             400

Ile Phe Ala Leu Cys Leu Arg Arg Asp Gly Thr Val Leu Ser Gly Gly
                405             410             415

Gly Arg Asp Arg Arg Leu Val Gln Trp Gly Pro Gly Leu Val Ala Leu
                420             425             430

Gln Glu Ala Glu Ile Pro Glu His Phe Gly Ala Val Arg Ala Ile Ala
                435             440             445

Glu Gly Leu Gly Ser Glu Leu Leu Val Gly Thr Thr Lys Asn Ala Leu
                450             455             460

Leu Arg Gly Asp Leu Ala Gln Gly Phe Ser Pro Val Ile Gln Gly His
465             470             475             480

Thr Asp Glu Leu Trp Gly Leu Cys Thr His Pro Ser Gln Asn Arg Phe
                485             490             495

Leu Thr Cys Gly His Asp Arg Gln Leu Cys Leu Trp Asp Gly Glu Ser
                500             505             510

His Ala Leu Ala Trp Ser Ile Asp Leu Lys Glu Thr Gly Leu Cys Ala
                515             520             525

Asp Phe His Pro Ser Gly Ala Val Val Ala Val Gly Leu Asn Thr Gly
                530             535             540

Arg Trp Leu Val Leu Asp Thr Glu Thr Arg Glu Ile Val Ser Asp Val
545             550             555             560

Ile Asp Gly Asn Glu Gln Leu Ser Val Val Arg Tyr Ser Pro Asp Gly
                565             570             575

Leu Tyr Leu Ala Ile Gly Ser His Asp Asn Val Ile Tyr Ile Tyr Ser
                580             585             590

Val Ser Ser Asp Gly Ala Lys Ser Ser Arg Phe Gly Arg Cys Met Gly

```
                595                 600                 605
His Ser Ser Phe Ile Thr His Leu Asp Trp Ser Lys Asp Gly Asn Phe
       610                 615                 620
Ile Met Ser Asn Ser Gly Asp Tyr Glu Ile Leu Tyr Trp Asp Val Ala
625                 630                 635                 640
Gly Gly Cys Lys Gln Leu Lys Asn Arg Tyr Glu Ser Arg Asp Arg Glu
                645                 650                 655
Trp Ala Thr Tyr Thr Cys Val Leu Gly Phe His Val Tyr Gly Val Trp
       660                 665                 670
Pro Asp Gly Ser Asp Gly Thr Asp Ile Asn Ser Leu Cys Arg Ser His
       675                 680                 685
Asn Glu Arg Val Val Ala Val Ala Asp Asp Phe Cys Lys Val His Leu
       690                 695                 700
Phe Gln Tyr Pro Cys Ala Arg Ala Lys Ala Pro Ser Arg Met Tyr Gly
705                 710                 715                 720
Gly His Gly Ser His Val Thr Ser Val Arg Phe Thr His Asp Asp Ser
                725                 730                 735
His Leu Val Ser Leu Gly Gly Lys Asp Ala Ser Ile Phe Gln Trp Arg
       740                 745                 750
Val Leu Gly Ala Gly Gly Ala Gly Pro Ala Pro Ala Thr Pro Ser Arg
       755                 760                 765
Thr Pro Ser Leu Ser Pro Ala Ser Ser Leu Asp Val
770                 775                 780
```

<210> 3862

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3862

Met Asp Glu Glu Thr Glu Ala Gln Arg Gly Arg Val Pro Cys Pro Arg
1               5                   10                  15

Ala Arg Ile Trp Arg Ala Gln Arg Asn Pro Gly Leu Cys Pro Gln Arg
                20                  25                  30

Ala Phe Gln Pro Leu Pro Phe Ser Gly Thr Trp Asn Pro Val Asp Leu
                35                  40                  45

Gln Pro Gly Ile Thr Gly Gly Gly Ala Val Arg Ala Ala Met Gln Pro
                50                  55                  60

Gly Gly Thr Glu Thr Gly Glu Gly Asp Arg Glu Glu Ala Gln Ile Trp
65                  70                  75                  80

Arg Gly Met Val Arg Pro Leu Gly Glu Gly Pro Trp Ala Arg Pro Pro
                85                  90                  95

His His Arg Pro Cys Pro Cys Leu Pro Asp Val Asp Glu Cys Leu Glu
                100                 105                 110

Gly Leu Asp Asp Cys His Tyr Asn Gln Leu Cys Glu Asn Thr Pro Gly
                115                 120                 125

Gly His Arg Cys Ser Cys Pro Arg Gly Tyr Arg Met Gln Gly Pro Ser
                130                 135                 140

Leu Pro Cys Leu Gly Thr Gly Thr Pro Thr Leu Trp Pro His Arg Cys
145                 150                 155                 160

Ser Cys Pro Arg Gly Tyr Arg Met Gln Gly Pro Ser Leu Pro Cys Leu
                165                 170                 175

Val Thr Gly Thr Pro Thr Leu Trp Pro Ala Pro Gln Leu Arg Gly
                180                 185                 190

<210> 3863

<211> 867

<212> PRT

<213> Homo sapiens


<400> 3863

Met Arg His Pro Gly Ser Arg Lys Phe Asn Thr Thr Glu Arg Val Leu
1                   5                   10                  15

Gln Gly Leu Leu Lys Pro Leu Phe Lys Ser Thr Ser Val Gly Pro Leu
                20                  25                  30

Tyr Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu Lys Arg Gly Ala
                35                  40                  45

Ala Thr Gly Val Asp Thr Ile Cys Thr His Arg Leu Asp Pro Leu Asn
            50                  55                  60

Pro Gly Leu Asp Arg Glu Gln Leu Tyr Trp Glu Leu Ser Lys Leu Thr
65                  70                  75                  80

Arg Gly Ile Ile Glu Leu Gly Pro Tyr Leu Leu Asp Arg Gly Ser Leu
                    85                  90                  95

Tyr Val Asn Gly Phe Thr His Arg Asn Phe Val Pro Ile Thr Ser Thr
                100                 105                 110

Pro Gly Thr Ser Thr Val His Leu Gly Thr Ser Glu Thr Pro Ser Ser
                115                 120                 125

Leu Pro Arg Pro Ile Val Pro Gly Pro Leu Leu Val Pro Phe Thr Leu
            130                 135                 140

Asn Phe Thr Ile Thr Asn Leu Gln Tyr Glu Glu Ala Met Arg His Pro
145                 150                 155                 160

Gly Ser Arg Lys Phe Asn Thr Thr Glu Arg Val Leu Gln Gly Leu Leu
                165                 170                 175

Arg Pro Leu Phe Lys Asn Thr Ser Ile Gly Pro Leu Tyr Ser Ser Cys
                180                 185                 190

Arg Leu Thr Leu Leu Arg Pro Glu Lys Asp Lys Ala Ala Thr Arg Val
        195                 200                 205

Asp Ala Ile Cys Thr His His Pro Asp Pro Gln Ser Pro Gly Leu Asn
        210                 215                 220

Arg Glu Gln Leu Tyr Trp Glu Leu Ser Gln Leu Thr His Gly Ile Thr
225                 230                 235                 240

Glu Leu Gly Pro Tyr Thr Leu Asp Arg His Ser Leu Tyr Val Asn Gly
                245                 250                 255

Phe Thr His Gln Ser Ser Met Thr Thr Thr Arg Thr Pro Asp Thr Ser
                260                 265                 270

Thr Met His Leu Ala Thr Ser Arg Thr Pro Ala Ser Leu Ser Gly Pro
        275                 280                 285

Thr Thr Ala Ser Pro Leu Leu Val Leu Phe Thr Ile Asn Phe Thr Ile
        290                 295                 300

Thr Asn Leu Arg Tyr Glu Glu Asn Met His His Pro Gly Ser Arg Lys
305                 310                 315                 320

Phe Asn Thr Thr Glu Arg Val Leu Gln Gly Leu Leu Arg Pro Val Phe
                325                 330                 335

Lys Asn Thr Ser Val Gly Pro Leu Tyr Ser Gly Cys Arg Leu Thr Leu
                340                 345                 350

Leu Arg Pro Lys Lys Asp Gly Ala Ala Thr Lys Val Asp Ala Ile Cys
        355                 360                 365

Thr Tyr Arg Pro Asp Pro Lys Ser Pro Gly Leu Asp Arg Glu Gln Leu
        370                 375                 380

Tyr Trp Glu Leu Ser Gln Leu Thr His Ser Ile Thr Glu Leu Gly Pro
385                 390                 395                 400

Tyr Thr Leu Asp Arg Asp Ser Leu Tyr Val Asn Gly Phe Thr Gln Arg
                405                 410                 415

Ser Ser Val Pro Thr Thr Ser Ile Pro Gly Thr Pro Thr Val Asp Leu

```
                420                425                430
Gly Thr Ser Gly Thr Pro Val Ser Lys Pro Gly Pro Ser Ala Ala Ser
                435                440                445
Pro Leu Leu Val Leu Phe Thr Leu Asn Phe Thr Ile Thr Asn Leu Arg
            450                455                460
Tyr Glu Glu Asn Met Gln His Pro Gly Ser Arg Lys Phe Asn Thr Thr
465                470                475                480
Glu Arg Val Leu Gln Gly Leu Leu Arg Ser Leu Phe Lys Ser Thr Ser
                485                490                495
Val Gly Pro Leu Tyr Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu
                500                505                510
Lys Asp Gly Thr Ala Thr Gly Val Asp Ala Ile Cys Thr His His Pro
            515                520                525
Asp Pro Lys Ser Pro Arg Leu Asp Arg Glu Gln Leu Tyr Trp Glu Leu
            530                535                540
Ser Gln Leu Thr His Asn Ile Thr Glu Leu Gly Pro Tyr Ala Leu Asp
545                550                555                560
Asn Asp Ser Leu Phe Val Asn Gly Phe Thr His Arg Ser Ser Val Ser
                565                570                575
Thr Thr Ser Thr Pro Gly Thr Pro Thr Val Tyr Leu Gly Ala Ser Lys
                580                585                590
Thr Pro Ala Ser Ile Phe Gly Pro Ser Ala Ala Ser His Leu Leu Ile
            595                600                605
Leu Phe Thr Leu Asn Phe Thr Ile Thr Asn Leu Arg Tyr Glu Glu Asn
            610                615                620
Met Trp Pro Gly Ser Arg Lys Phe Asn Thr Thr Glu Arg Val Leu Gln
625                630                635                640
Gly Leu Leu Arg Pro Leu Phe Lys Asn Thr Ser Val Gly Pro Leu Tyr
                645                650                655
```

Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu Lys Asp Gly Glu Ala
　　　　　　660　　　　　　　　　665　　　　　　　　670

Thr Gly Val Asp Ala Ile Cys Thr His Arg Pro Asp Pro Thr Gly Pro
　　　　　　675　　　　　　　　　680　　　　　　　　685

Gly Leu Asp Arg Glu Gln Leu Tyr Leu Glu Leu Ser Gln Leu Thr His
　　　　　　690　　　　　　　　　695　　　　　　　　700

Ser Ile Thr Glu Leu Gly Pro Tyr Thr Leu Asp Arg Asp Ser Leu Tyr
705　　　　　　　　　710　　　　　　　　　715　　　　　　　　　720

Val Asn Gly Phe Thr His Arg Ser Ser Val Pro Thr Thr Ser Thr Gly
　　　　　　　725　　　　　　　　730　　　　　　　　　735

Val Val Ser Glu Glu Pro Phe Thr Leu Asn Phe Thr Ile Asn Asn Leu
　　　　　　740　　　　　　　　　745　　　　　　　　750

Arg Tyr Met Ala Asp Met Gly Gln Pro Gly Ser Leu Lys Phe Asn Ile
　　　　　　755　　　　　　　　　760　　　　　　　　765

Thr Asp Asn Val Met Gln His Leu Leu Ser Pro Leu Phe Gln Arg Ser
　　　　770　　　　　　　　　775　　　　　　　　　780

Ser Leu Gly Ala Arg Tyr Thr Gly Cys Arg Val Ile Ala Leu Arg Ser
785　　　　　　　　　790　　　　　　　　　795　　　　　　　　　800

Val Lys Asn Gly Ala Glu Thr Arg Val Asp Leu Leu Cys Thr Tyr Leu
　　　　　　　805　　　　　　　　810　　　　　　　　　815

Gln Pro Leu Ser Gly Pro Gly Leu Pro Ile Lys Gln Val Phe His Glu
　　　　　　820　　　　　　　　　825　　　　　　　　830

Leu Ser Gln Gln Thr His Gly Ile Thr Arg Leu Gly Pro Tyr Ser Leu
　　　　　　835　　　　　　　　　840　　　　　　　　845

Asp Lys Asp Ser Leu Tyr Leu Asn Gly His His Thr Leu Gln Arg Gln
　　　　　　850　　　　　　　　　855　　　　　　　　860

Ser Thr Thr
865

<210> 3864

<211> 1714

<212> PRT

<213> Homo sapiens


<400> 3864

```
Met Asn Ile Lys Ala Pro Lys Ile Ser Met Pro Asp Phe Asp Leu His
1               5                   10                  15

Leu Lys Gly Pro Lys Val Lys Gly Asp Val Asp Val Ser Leu Pro Lys
                20                  25                  30

Met Glu Gly Asp Leu Lys Ala Pro Glu Val Asp Ile Lys Gly Pro Lys
            35                  40                  45

Val Asp Ile Asp Ala Pro Asp Val Asp Val His Gly Pro Asp Trp His
        50                  55                  60

Leu Lys Met Pro Lys Val Lys Met Pro Lys Phe Ser Met Pro Gly Phe
65                  70                  75                  80

Lys Gly Glu Gly Pro Glu Val Asp Val Asn Leu Pro Lys Ala Asp Ile
                85                  90                  95

Asp Val Ser Gly Pro Lys Val Asp Ile Asp Thr Pro Asp Ile Asp Ile
                100                 105                 110

His Gly Pro Glu Gly Lys Leu Lys Gly Pro Lys Phe Lys Met Pro Asp
            115                 120                 125

Leu His Leu Lys Ala Pro Lys Ile Ser Met Pro Glu Val Asp Leu Asn
        130                 135                 140

Leu Lys Gly Pro Lys Met Lys Gly Asp Val Asp Val Ser Leu Pro Lys
145                 150                 155                 160

Val Glu Gly Asp Leu Lys Gly Pro Glu Val Asp Ile Lys Gly Pro Lys
                165                 170                 175
```

```
Val Asp Ile Asp Val Pro Asp Val Asp Val Gln Gly Pro Asp Trp His
        180             185             190

Leu Lys Met Pro Lys Val Lys Met Pro Lys Phe Ser Met Pro Gly Phe
        195             200             205

Lys Gly Glu Gly Pro Asp Val Asp Val Asn Leu Pro Lys Ala Asp Leu
        210             215             220

Asp Val Ser Gly Pro Lys Val Asp Ile Asp Val Pro Asp Val Asn Ile
225             230             235             240

Glu Gly Pro Asp Ala Lys Leu Lys Gly Pro Lys Phe Lys Met Pro Glu
                245             250             255

Met Asn Ile Lys Ala Pro Lys Ile Ser Met Pro Asp Phe Asp Leu His
                260             265             270

Leu Lys Gly Pro Lys Val Lys Gly Asp Val Asp Val Ser Leu Pro Lys
        275             280             285

Val Glu Gly Asp Leu Lys Gly Pro Glu Val Asp Ile Lys Gly Pro Lys
        290             295             300

Val Asp Ile Asp Ala Pro Asp Val Asp Val His Gly Pro Asp Trp His
305             310             315             320

Leu Lys Met Pro Lys Val Lys Met Pro Lys Phe Ser Met Pro Gly Phe
                325             330             335

Lys Gly Glu Gly Pro Asp Val Asp Val Thr Leu Pro Lys Ala Asp Ile
        340             345             350

Glu Ile Ser Gly Pro Lys Val Asp Ile Asp Ala Pro Asp Val Ser Ile
        355             360             365

Glu Gly Pro Asp Ala Lys Leu Lys Gly Pro Lys Phe Lys Met Pro Glu
        370             375             380

Met Asn Ile Lys Ala Pro Lys Ile Ser Met Pro Asp Ile Asp Phe Asn
385             390             395             400

Leu Lys Gly Pro Lys Val Lys Gly Asp Val Asp Val Ser Leu Pro Lys
```

```
                    405              410              415
Val Glu Gly Asp Leu Lys Gly Pro Glu Ile Asp Ile Lys Gly Pro Ser
              420              425              430
Leu Asp Ile Asp Thr Pro Asp Val Asn Ile Glu Gly Pro Glu Gly Lys
          435              440              445
Leu Lys Gly Pro Lys Phe Lys Met Pro Glu Met Asn Ile Lys Ala Pro
      450              455              460
Lys Ile Ser Met Pro Asp Phe Asp Leu His Leu Lys Gly Pro Lys Val
  465              470              475              480
Lys Gly Asp Val Asp Val Ser Leu Pro Lys Val Glu Ser Asp Leu Lys
                  485              490              495
Gly Pro Glu Val Asp Ile Glu Gly Pro Glu Gly Lys Leu Lys Gly Pro
              500              505              510
Lys Phe Lys Met Pro Asp Val His Phe Lys Ser Pro Gln Ile Ser Met
          515              520              525
Ser Asp Ile Asp Leu Asn Leu Lys Gly Pro Lys Ile Lys Gly Asp Met
      530              535              540
Asp Ile Ser Val Pro Lys Leu Glu Gly Asp Leu Lys Gly Pro Lys Val
  545              550              555              560
Asp Val Lys Gly Pro Lys Val Gly Ile Asp Thr Pro Asp Ile Asp Ile
              565              570              575
His Gly Pro Glu Gly Lys Leu Lys Gly Pro Lys Phe Lys Met Pro Asp
          580              585              590
Leu His Leu Lys Ala Pro Lys Ile Ser Met Pro Glu Val Asp Leu Asn
          595              600              605
Leu Lys Gly Pro Lys Val Lys Gly Asp Met Asp Ile Ser Leu Pro Lys
      610              615              620
Val Glu Gly Asp Leu Lys Gly Pro Glu Val Asp Ile Arg Asp Pro Lys
  625              630              635              640
```

●

Val Asp Ile Asp Val Pro Asp Val Asp Val Gln Gly Pro Asp Trp His
　　　　　　　　645　　　　　　　　650　　　　　　　　655

Leu Lys Met Pro Lys Val Lys Met Pro Lys Phe Ser Met Pro Gly Phe
　　　　　　　　660　　　　　　　　665　　　　　　　　670

Glu Gly Glu Gly Pro Asp Val Asp Val Asn Leu Pro Lys Ala Asp Ile
　　　　　　675　　　　　　　　680　　　　　　　　685

Asp Val Ser Gly Pro Lys Val Asp Val Asp Val Pro Asp Val Asn Ile
　　　　　　690　　　　　　　　695　　　　　　　　700

Glu Gly Pro Asp Ala Lys Leu Lys Gly Pro Lys Phe Lys Met Pro Glu
705　　　　　　　　710　　　　　　　　715　　　　　　　　720

●

Met Ser Ile Lys Ala Pro Lys Ile Ser Met Pro Asp Ile Asp Leu Asn
　　　　　　　　725　　　　　　　　730　　　　　　　　735

Leu Lys Gly Pro Lys Val Lys Gly Asp Val Asp Val Thr Leu Pro Lys
　　　　　　　　740　　　　　　　　745　　　　　　　　750

Val Glu Gly Asp Leu Lys Gly Pro Glu Ala Asp Ile Lys Gly Pro Lys
　　　　　　755　　　　　　　　760　　　　　　　　765

Val Asp Ile Asn Thr Pro Asp Val Asp Val His Gly Pro Asp Trp His
　　　　　　770　　　　　　　775　　　　　　　　780

Leu Lys Met Pro Lys Val Lys Met Pro Lys Phe Ser Met Pro Gly Phe
785　　　　　　　　790　　　　　　　795　　　　　　　　800

●

Lys Gly Glu Gly Pro Asp Val Asp Val Ser Leu Pro Lys Ala Asp Ile
　　　　　　　　805　　　　　　　　810　　　　　　　　815

Asp Val Ser Gly Pro Arg Val Asp Val Asp Ile Pro Asp Val Asn Ile
　　　　　　820　　　　　　　825　　　　　　　　830

Glu Gly Pro Asp Ala Lys Leu Lys Gly Pro Lys Phe Lys Met Pro Glu
　　　　　　835　　　　　　　840　　　　　　　　845

Ile Asn Ile Lys Ala Pro Lys Ile Ser Ile Pro Asp Val Asp Leu Asp
　　　　850　　　　　　　　855　　　　　　　　860

Leu Lys Gly Pro Lys Val Lys Gly Asp Phe Asp Val Ser Val Pro Lys

865　　　　　　　870　　　　　　　875　　　　　　　880

Val Glu Gly Thr Leu Lys Gly Pro Glu Val Asp Leu Lys Gly Pro Arg

　　　　　　　885　　　　　　　890　　　　　　　895

Leu Asp Phe Glu Gly Pro Asp Ala Lys Leu Ser Gly Pro Ser Leu Lys

　　　　　　　900　　　　　　　905　　　　　　　910

Met Pro Ser Leu Glu Ile Ser Ala Pro Lys Val Thr Ala Pro Asp Val

　　　　　　　915　　　　　　　920　　　　　　　925

Asp Leu His Leu Lys Ala Pro Lys Ile Gly Phe Ser Gly Pro Lys Leu

　　　　　　　930　　　　　　　935　　　　　　　940

Glu Gly Gly Glu Val Asp Leu Lys Gly Pro Lys Val Glu Ala Pro Ser

945　　　　　　　950　　　　　　　955　　　　　　　960

Leu Asp Val His Met Asp Ser Pro Asp Ile Asn Ile Glu Gly Pro Asp

　　　　　　　965　　　　　　　970　　　　　　　975

Val Lys Ile Pro Lys Phe Lys Lys Pro Lys Phe Gly Phe Gly Ala Lys

　　　　　　　980　　　　　　　985　　　　　　　990

Ser Pro Lys Ala Asp Ile Lys Ser Pro Ser Leu Asp Val Thr Val Pro

　　　　　　　995　　　　　　　1000　　　　　　　1005

Glu Ala Glu Leu Asn Leu Glu Thr Pro Glu Ile Ser Val Gly Gly Lys

　　　　　　　1010　　　　　　　1015　　　　　　　1020

Gly Lys Lys Ser Lys Phe Lys Met Pro Lys Ile His Met Ser Gly Pro

1025　　　　　　　1030　　　　　　　1035　　　　　　　1040

Lys Ile Lys Ala Lys Lys Gln Gly Phe Asp Leu Asn Val Pro Gly Gly

　　　　　　　1045　　　　　　　1050　　　　　　　1055

Glu Ile Asp Ala Ser Leu Lys Ala Pro Asp Val Asp Val Asn Ile Ala

　　　　　　　1060　　　　　　　1065　　　　　　　1070

Gly Pro Asp Ala Ala Leu Lys Val Asp Val Lys Ser Pro Lys Thr Lys

　　　　　　　1075　　　　　　　1080　　　　　　　1085

Lys Thr Met Phe Gly Lys Met Tyr Phe Pro Asp Val Glu Phe Asp Ile

　　　　　　　1090　　　　　　　1095　　　　　　　1100

Lys Ser Pro Lys Phe Lys Ala Glu Ala Pro Leu Pro Ser Pro Lys Leu
1105              1110              1115              1120

Glu Gly Glu Leu Gln Ala Pro Asp Leu Glu Leu Ser Leu Pro Ala Ile
              1125              1130              1135

His Val Glu Gly Leu Asp Ile Lys Ala Lys Ala Pro Lys Val Lys Met
              1140              1145              1150

Pro Asp Val Asp Ile Ser Val Pro Lys Ile Glu Gly Asp Leu Lys Gly
              1155              1160              1165

Pro Lys Val Gln Ala Asn Leu Gly Ala Pro Asp Ile Asn Ile Glu Gly
           1170              1175              1180

Leu Asp Ala Lys Val Lys Thr Pro Ser Phe Gly Ile Ser Ala Pro Gln
1185              1190              1195              1200

Val Ser Ile Pro Asp Val Asn Val Asn Leu Lys Gly Pro Lys Ile Lys
              1205              1210              1215

Gly Asp Val Pro Ser Val Gly Leu Glu Gly Pro Asp Val Asp Leu Gln
              1220              1225              1230

Gly Pro Glu Ala Lys Ile Lys Phe Pro Lys Phe Ser Met Pro Lys Ile
            1235              1240              1245

Gly Ile Pro Gly Val Lys Met Glu Gly Gly Gly Ala Glu Val His Ala
            1250              1255              1260

Gln Leu Pro Ser Leu Glu Gly Asp Leu Arg Gly Pro Asp Val Lys Leu
1265              1270              1275              1280

Glu Gly Pro Asp Val Ser Leu Lys Gly Pro Gly Val Asp Leu Pro Ser
              1285              1290              1295

Val Asn Leu Ser Met Pro Lys Val Ser Gly Pro Asp Leu Asp Leu Asn
            1300              1305              1310

Leu Lys Gly Pro Ser Leu Lys Gly Asp Leu Asp Ala Ser Val Pro Ser
            1315              1320              1325

Met Lys Val His Ala Pro Gly Leu Asn Leu Ser Gly Val Gly Gly Lys

●

```
        1330                1335                1340
Met Gln Val Gly Gly Asp Gly Val Lys Val Pro Gly Ile Asp Ala Thr
1345                1350                1355                1360
Thr Lys Leu Asn Val Gly Ala Pro Asp Val Thr Leu Arg Gly Pro Ser
                1365                1370                1375
Leu Gln Gly Asp Leu Ala Val Ser Gly Asp Ile Lys Cys Pro Lys Val
                1380                1385                1390
Ser Val Gly Ala Pro Asp Leu Ser Leu Glu Ala Ser Glu Gly Ser Ile
                1395                1400                1405
Lys Leu Pro Lys Met Lys Leu Pro Gln Phe Gly Ile Ser Thr Pro Gly
        1410                1415                1420
Ser Asp Leu His Val Asn Ala Lys Gly Pro Gln Val Ser Gly Glu Leu
1425                1430                1435                1440
Lys Gly Pro Gly Val Asp Val Asn Leu Lys Gly Pro Arg Ile Ser Ala
                1445                1450                1455
Pro Asn Val Asp Phe Asn Leu Glu Gly Pro Lys Val Lys Gly Ser Leu
                1460                1465                1470
Gly Ala Thr Gly Glu Ile Lys Gly Pro Thr Val Gly Gly Gly Leu Ser
        1475                1480                1485
Gly Ile Gly Val Gln Gly Leu Glu Gly Asn Leu Gln Met Pro Gly Ile
        1490                1495                1500
Lys Ser Ser Gly Cys Asp Val Asn Leu Pro Gly Val Asn Val Lys Leu
1505                1510                1515                1520
Pro Thr Gly Gln Ile Ser Gly Pro Glu Ile Lys Gly Gly Leu Lys Gly
                1525                1530                1535
Ser Glu Val Gly Phe His Gly Ala Ala Pro Asp Ile Ser Val Lys Gly
        1540                1545                1550
Pro Ala Phe Asn Met Ala Ser Pro Glu Ser Asp Phe Gly Ile Asn Leu
        1555                1560                1565
```

Lys Gly Pro Lys Ile Lys Gly Gly Ala Asp Val Ser Gly Gly Val Ser
　　1570　　　　　　　　1575　　　　　　　　1580

Ala Pro Asp Ile Ser Leu Gly Glu Gly His Leu Ser Val Lys Gly Ser
　1585　　　　　　　　1590　　　　　　　　1595　　　　　　　　1600

Gly Gly Glu Trp Lys Gly Pro Gln Val Ser Ser Ala Leu Asn Leu Asp
　　　　　　　　1605　　　　　　　　1610　　　　　　　　1615

Thr Ser Lys Phe Ala Gly Gly Leu His Phe Ser Gly Pro Lys Val Glu
　　　　1620　　　　　　　　1625　　　　　　　　1630

Gly Gly Val Lys Gly Gly Gln Ile Gly Leu Gln Ala Pro Gly Leu Ser
　　　　　1635　　　　　　　　1640　　　　　　　　1645

Val Ser Gly Pro Gln Gly His Leu Glu Ser Gly Ser Gly Lys Val Thr
　　1650　　　　　　　　1655　　　　　　　　1660

Phe Pro Lys Met Lys Ile Pro Lys Phe Thr Phe Ser Gly Arg Glu Leu
　1665　　　　　　　　1670　　　　　　　　1675　　　　　　　　1680

Val Gly Arg Glu Met Gly Val Asp Val His Phe Pro Lys Ala Glu Ala
　　　　　　　　1685　　　　　　　　1690　　　　　　　　1695

Ser Ile Gln Ala Gly Ala Gly Asp Gly Glu Trp Glu Glu Ser Glu Val
　　　　　　1700　　　　　　　　1705　　　　　　　　1710

Lys Leu


<210> 3865

<211> 493

<212> PRT

<213> Homo sapiens


<400> 3865

Met Arg Pro Ile Ile Cys Ile Cys Asn Asp Gln Phe Ala Pro Ser Leu

```
        1              5                   10                  15
Arg Gln Leu Lys Gln Gln Ala Phe Leu Leu His Phe Pro Pro Thr Leu
              20                  25                  30
Pro Ser Arg Leu Val Gln Arg Leu Gln Glu Val Ser Leu Arg Gln Gly
              35                  40                  45
Met Arg Ala Asp Pro Gly Val Leu Ala Ala Leu Cys Glu Lys Thr Asp
          50                  55                  60
Asn Asp Ile Arg Ala Cys Ile Asn Thr Leu Gln Phe Leu Tyr Ser Arg
      65                  70                  75                  80
Gly Gln Arg Glu Leu Ser Val Arg Asp Val Gln Ala Thr Arg Val Gly
                  85                  90                  95
Leu Lys Asp Gln Arg Arg Gly Leu Phe Ser Val Trp Gln Glu Val Phe
                  100                 105                 110
Gln Leu Pro Arg Ala Gln Arg Arg Val Gly Gln Asp Pro Ala Leu
                  115                 120                 125
Pro Ala Asp Thr Leu Leu Leu Gly Asp Gly Asp Ala Gly Ser Leu Thr
              130                 135                 140
Ser Ala Ser Gln Arg Phe Tyr Arg Val Leu His Ala Ala Ala Ser Ala
      145                 150                 155                 160
Gly Glu His Glu Lys Val Val Gln Gly Leu Phe Asp Asn Phe Leu Arg
                  165                 170                 175
Leu Arg Leu Arg Asp Ser Ser Leu Gly Ala Val Cys Val Ala Leu Asp
                  180                 185                 190
Trp Leu Ala Phe Asp Asp Leu Leu Ala Gly Ala Ala His His Ser Gln
                  195                 200                 205
Ser Phe Gln Leu Leu Arg Tyr Pro Pro Phe Leu Pro Val Ala Phe His
              210                 215                 220
Val Leu Phe Ala Ser Ser His Thr Pro Arg Ile Thr Phe Pro Ser Ser
      225                 230                 235                 240
```

Gln Gln Glu Ala Gln Asn Arg Met Ser Gln Met Arg Asn Leu Ile Gln
           245          250          255

Thr Leu Val Ser Gly Ile Ala Pro Ala Thr Arg Ser Arg Ala Thr Pro
           260          265          270

Gln Ala Leu Leu Leu Asp Ala Leu Cys Leu Leu Leu Asp Ile Leu Ala
           275          280          285

Pro Lys Leu Arg Pro Val Ser Thr Gln Leu Tyr Ser Thr Arg Glu Lys
           290          295          300

Gln Gln Leu Ala Ser Leu Val Gly Thr Met Leu Ala Tyr Ser Leu Thr
305            310          315          320

Tyr Arg Gln Glu Arg Thr Pro Asp Gly Gln Tyr Ile Tyr Arg Leu Glu
           325          330          335

Pro Asn Val Glu Glu Leu Cys Arg Phe Pro Glu Leu Pro Ala Arg Lys
           340          345          350

Pro Leu Thr Tyr Gln Thr Lys Gln Leu Ile Ala Arg Glu Ile Glu Val
           355          360          365

Glu Lys Met Arg Arg Ala Glu Ala Ser Ala Arg Val Glu Asn Ser Pro
           370          375          380

Gln Val Asp Gly Ser Pro Pro Gly Leu Glu Gly Leu Leu Gly Gly Ile
385            390          395          400

Gly Glu Lys Gly Val His Arg Pro Ala Pro Arg Asn His Glu Gln Arg
           405          410          415

Leu Glu His Ile Met Arg Arg Ala Ala Arg Glu Glu Gln Pro Glu Lys
           420          425          430

Asp Phe Phe Gly Arg Val Val Val Arg Ser Thr Ala Val Pro Ser Ala
           435          440          445

Gly Asp Thr Ala Pro Glu Gln Asp Ser Val Glu Arg Arg Met Gly Thr
           450          455          460

Ala Val Gly Arg Ser Glu Val Trp Phe Arg Phe Asn Glu Gly Val Ser

465                470                475                480

Asn Ala Val Arg Arg Ser Leu Tyr Ile Arg Asp Leu Leu
                   485                490

<210> 3866

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3866

Met Thr Val Pro Ser Lys His Val Arg Met Leu Pro Cys Leu Cys Trp
1                5                10                15

Gln Leu Pro Lys His Gly Asp Trp Ala Trp Trp Gln Val Phe Val Leu
                   20                25                30

Leu Lys Glu Gln Phe Cys Cys Glu Val Thr Cys Ser Leu Ser Ser Cys
              35                40                45

Leu Arg Pro Thr Trp Arg Leu Leu Arg Glu Glu Arg Gly Gly Pro Ala
         50                55                60

Ala Ala Gln His Pro Ala Thr Leu Pro Gly Val Cys Val Ser Trp Gly
65                70                75                80

Glu Arg Pro Gly Thr Val Ala Leu Trp Ser Ile Leu Trp Met Ser Thr
                   85                90                95

Arg Pro Gly Arg Ser Val Gly Leu Gly Gly Ser Pro Val Trp Ala Ala
                   100                105                110

Pro Ala Gly Leu Gly Val Gly Leu Leu Leu Val Cys Pro Gln Leu His
              115                120                125

Asn Val Ser Cys Ala Leu Pro Ser Cys Thr Ser Ala Gly Phe Gly Tyr
130                135                140

Gly Pro Pro Pro Pro Pro Pro Asp Gln Phe Ala Pro Pro Gly Val Pro
145              150                155                160

Pro Pro Pro Ala Thr Pro Gly Ala Ala Pro Leu Ala Phe Pro Pro Pro
              165                170                175

Pro Ser Gln Ala Ala Pro Gly Met Ser Lys Pro Pro Thr Ala Gln Pro
              180                185                190

Asp Phe Pro Tyr Gly Gln Tyr Gly Lys Trp Ser Pro Ala Met Pro Arg
              195                200                205

Pro Arg Trp Pro Gln Asp Pro Gly His Gly Leu Pro Ser Ser Ala Ser
              210                215                220

Ser Pro Ala Gly Arg Ser Pro Ala Phe Thr Trp Cys Glu Arg Gly Glu
225              230                235                240

Gly Gly Glu Gly Gly Val Gly Val Val Gly Glu Ile Ser Trp Gln Leu
              245                250                255

Gly Ser Ser Arg Arg Glu Arg Gly Ser Leu Val Ala Ala Glu His Ser
              260                265                270

Ser Tyr Ser Arg Cys Cys Arg Ala Cys Met Cys Gly Asn Leu Ser Gly
              275                280                285

Asp Arg Val Glu Gly Ser Glu Ser Gln Ala Ala Val Ile Thr Val
              290                295                300


<210> 3867

<211> 168

<212> PRT

<213> Homo sapiens


<400> 3867

Met Pro Leu Ile Trp Lys Pro Gly Tyr Leu Asp Arg Ala Leu Gln Val

```
       1                5                10               15
Met Glu Lys Val Ala Ala Ser Pro Glu Asp Ile Lys Leu Cys Arg Glu
              20               25               30
Ala Leu Asp Val Leu Gly Ala Val Leu Lys Ala Leu Thr Ser Ala Asp
              35               40               45
Gly Ala Ser Glu Glu Gln Ser Gln Asn Asp Glu Asp Asn Gln Gly Ser
              50               55               60
Glu Lys Leu Val Glu Gln Leu Asp Ile Glu Glu Thr Glu Gln Ser Lys
       65               70               75               80
Leu Pro Gln Tyr Leu Glu Arg Phe Lys Ala Leu His Ser Lys Leu Gln
                      85               90               95
Ala Leu Gly Lys Ile Glu Ser Glu Gly Leu Leu Ser Leu Thr Thr Gln
                     100              105              110
Leu Val Lys Glu Lys Leu Ser Thr Cys Glu Ala Glu Asp Ile Ala Thr
              115              120              125
Tyr Glu Gln Asn Leu Gln Gln Trp His Leu Asp Leu Val Gln Leu Ile
       130              135              140
Gln Arg Glu Gln Gln Gln Arg Glu Gln Ala Lys Gln Glu Tyr Gln Ala
145              150              155              160
Gln Lys Ala Ala Lys Ala Ser Ala
              165
```

<210> 3868

<211> 392

<212> PRT

<213> Homo sapiens


<400> 3868

Met Lys Leu Gln Ser Thr Pro Gly Ser Gly Pro Leu Val Ser Ser Gly
1               5                   10                  15

Cys Gln Ala Gln Gln Leu Ala Val Arg Leu Glu Pro Gln Gly Leu Leu
                20                  25                  30

Tyr Ala Lys Leu Thr Leu Ser Glu Gln Gln Glu Ala Pro Ala Thr Ala
                35                  40                  45

Glu Pro Arg Val Phe Gly Leu Pro Leu Pro Leu Leu Val Glu Arg Glu
                50                  55                  60

Arg Pro Pro Gly Gln Val Pro Leu Ile Ile Gln Lys Cys Val Gly Gln
65                  70                  75                  80

Ile Glu Arg Arg Gly Leu Arg Val Val Gly Leu Tyr Arg Leu Cys Gly
                85                  90                  95

Ser Ala Ala Val Lys Lys Glu Leu Arg Asp Ala Phe Glu Arg Asp Ser
                100                 105                 110

Ala Ala Val Cys Leu Ser Glu Asp Leu Tyr Pro Asp Ile Asn Val Ile
                115                 120                 125

Thr Gly Ile Leu Lys Asp Tyr Leu Arg Glu Leu Pro Thr Pro Leu Ile
                130                 135                 140

Thr Gln Pro Leu Tyr Lys Val Val Leu Glu Ala Met Ala Arg Asp Pro
145                 150                 155                 160

Pro Asn Arg Val Pro Pro Thr Thr Glu Gly Thr Arg Gly Leu Leu Ser
                165                 170                 175

Cys Leu Pro Asp Val Glu Arg Ala Thr Leu Thr Leu Leu Leu Asp His
                180                 185                 190

Leu Arg Leu Val Ser Ser Phe His Ala Tyr Asn Arg Met Thr Pro Gln
                195                 200                 205

Asn Leu Ala Val Cys Phe Gly Pro Val Leu Leu Pro Ala Arg Gln Ala
                210                 215                 220

Pro Thr Arg Pro Arg Ala Arg Ser Ser Gly Pro Gly Leu Ala Ser Ala

●

```
        225                   230                   235                   240
Val Asp Phe Lys His His Ile Glu Val Leu His Tyr Leu Leu Gln Ser
                      245                   250                   255
Trp Pro Asp Pro Arg Leu Pro Arg Gln Ser Pro Asp Val Ala Pro Tyr
                      260                   265                   270
Leu Arg Pro Lys Arg Gln Pro Pro Leu His Leu Pro Leu Ala Asp Pro
                      275                   280                   285
Glu Val Val Thr Arg Pro Arg Gly Arg Gly Gly Pro Glu Ser Pro Pro
                      290                   295                   300
Ser Asn Arg Tyr Ala Gly Asp Trp Ser Val Cys Gly Arg Asp Phe Leu
305                   310                   315                   320
Pro Cys Gly Arg Asp Phe Leu Ser Gly Pro Asp Tyr Asp His Val Thr
                      325                   330                   335
Gly Ser Asp Ser Glu Asp Glu Asp Glu Glu Val Gly Glu Pro Arg Ala
                      340                   345                   350
Thr Gly Asp Phe Glu Asp Asp Phe Asp Ala Pro Phe Asn Pro His Leu
                      355                   360                   365
Asn Leu Lys Asp Phe Asp Ala Leu Ile Leu Asp Leu Glu Arg Glu Leu
                      370                   375                   380
Ser Lys Gln Ile Asn Val Cys Leu
385                   390
```

●

```
<210> 3869
<211> 146
<212> PRT
<213> Homo sapiens


<400> 3869
```

●

Met Gly Phe His His Phe Ala Gln Asp Gly Leu Glu Leu Leu Ser Ser
1                   5                   10                  15

Gly Asn Leu Pro Thr Ser Ala Ser His Ser Ala Gly Ile Thr Asp Met
              20                  25                  30

Gly His His Ala Gln Arg Leu Leu Lys Val Gln Leu Asp His Ser Ile
              35                  40                  45

Tyr Leu Leu Ile Thr Met Ala Phe Ala Ser Pro Leu Thr Gln Lys Lys
        50                  55                  60

Phe Leu Leu His Cys Arg Thr Ala Pro Pro Thr Thr Gly Cys Leu Gly
65                  70                  75                  80

Phe Leu Ala Ala Thr Pro Lys Gly Pro Asn Gly Ala Gly His Gly Gly
              85                  90                  95

Ile His Thr Ile Val Thr Thr Lys Tyr Ala His Met Met Pro Lys Ala
              100                 105                 110

Ser Val Leu Ala Pro Pro Phe His Cys Val Thr Val Leu Gly Trp Phe
              115                 120                 125

Ser His Leu Lys His Gly Asp Gly Asp Asn Lys Leu Glu Arg Val Ser
        130                 135                 140

Cys Lys
145

<210> 3870

<211> 137

<212> PRT

<213> Homo sapiens

<400> 3870

Met Leu Ala Glu Asn Thr Glu Gln Arg Met Gln Val Gln Gln Gln His

```
         1              5             10             15
Ser Gln Glu Gly Ser Pro Arg Ile Gly Arg Pro Thr Val Leu Leu Gly
            20             25             30
Ser Ser Ala Val Ile Arg Arg Ser Val Ala Val His Asp Ala Leu Cys
        35             40             45
Val Glu Val Leu Lys Thr Ser Ala Gly Leu Gly Leu Ser Leu Asp Gly
        50             55             60
Gly Lys Ser Ser Val Thr Gly Asp Gly Pro Leu Val Ile Lys Arg Val
    65             70             75             80
Tyr Lys Gly Gly Ala Ala Glu Gln Ala Gly Ile Ile Glu Ala Gly Asp
                85             90             95
Glu Ile Leu Ala Ile Asn Gly Lys Pro Leu Val Gly Leu Met His Phe
            100            105            110
Asp Ala Trp Asn Ile Met Lys Ser Val Pro Glu Gly Pro Val Gln Leu
            115            120            125
Leu Ile Arg Lys His Arg Asn Ser Ser
    130            135
```

<210> 3871

<211> 172

<212> PRT

<213> Homo sapiens


<400> 3871

```
Met Ser Phe Leu Cys Leu Val Val Leu Tyr Tyr Ile Val Trp Ser Val
  1              5             10             15
Leu Phe Leu Arg Ser Met Asp Val Ile Ala Glu Gln Arg Arg Thr His
            20             25             30
```

●

```
Ile Thr Met Ala Leu Ser Trp Met Thr Ile Val Val Pro Leu Leu Thr
        35                  40                  45
Phe Glu Ile Leu Leu Val His Lys Leu Asp Gly His Asn Ala Phe Ser
        50                  55                  60
Cys Ile Pro Ile Phe Val Pro Leu Trp Leu Ser Leu Ile Thr Leu Met
65                  70                  75                  80
Ala Thr Thr Phe Gly Gln Lys Gly Gly Asn His Trp Trp Phe Gly Ile
                85                  90                  95
Arg Lys Asp Phe Cys Gln Phe Leu Leu Glu Ile Phe Pro Phe Leu Arg
                100                 105                 110
Glu Tyr Gly Asn Ile Ser Tyr Asp Leu His His Glu Asp Asn Glu Glu
                115                 120                 125
Thr Glu Glu Thr Pro Val Pro Glu Pro Pro Lys Ile Ala Pro Met Phe
        130                 135                 140
Arg Lys Lys Ala Arg Val Val Ile Thr Gln Ser Pro Gly Lys Tyr Val
145                 150                 155                 160
Leu Pro Pro Pro Lys Leu Asn Ile Glu Met Pro Asp
                165                 170
```

●

```
<210> 3872

<211> 175

<212> PRT

<213> Homo sapiens


<400> 3872

Met Ala Thr Ala Thr Asn Glu Leu Gly Gln Ala Thr Cys Ala Ala Ser
1                   5                   10                  15
Leu Thr Val Arg Pro Gly Gly Ser Thr Ser Pro Phe Ser Ser Pro Ile
```

```
                20                      25                      30
Thr Ser Asp Glu Glu Tyr Leu Ser Pro Pro Glu Glu Phe Pro Glu Pro
                35                      40                      45
Gly Glu Thr Trp Pro Arg Thr Pro Thr Met Lys Pro Ser Pro Ser Gln
            50                      55                      60
Asn Arg Arg Ser Ser Asp Thr Gly Ser Lys Ala Pro Pro Thr Phe Lys
    65                      70                      75                      80
Val Ser Leu Met Asp Gln Ser Val Arg Glu Gly Gln Asp Val Ile Met
                    85                      90                      95
Ser Ile Arg Val Gln Gly Glu Pro Lys Pro Val Val Ser Trp Leu Arg
                100                     105                     110
Asn Arg Gln Pro Val Arg Pro Asp Gln Arg Arg Phe Ala Glu Glu Ala
            115                     120                     125
Glu Gly Gly Leu Cys Arg Leu Arg Ile Leu Ala Ala Glu Arg Gly Asp
        130                     135                     140
Ala Gly Phe Tyr Thr Cys Lys Ala Val Asn Glu Tyr Gly Ala Arg Gln
145                     150                     155                     160
Cys Glu Ala Arg Leu Glu Val Arg Gly Glu Tyr Leu Ile Ser Pro
                165                     170                     175
```

<210> 3873

<211> 172

<212> PRT

<213> Homo sapiens


<400> 3873

```
Met Leu His Phe His Tyr Tyr Asp Thr Ser Asn Lys Ile Met Glu Pro
1                   5                       10                      15
```

His Arg Pro Asn Val Lys Thr Ala Val Pro Leu Ser Leu Glu Ser Tyr
　　　　　　　　　20　　　　　　　　　　25　　　　　　　　　　30

His Ile Ser Glu Glu Tyr Gly Phe Leu Leu Pro Asp Ser Leu Lys Glu
　　　　　　　　　35　　　　　　　　　　40　　　　　　　　　　45

Leu Pro Asp His Tyr Arg Pro Trp Met Glu Ile Ala Asn Lys Leu Pro
　　　　　　　　　50　　　　　　　　　　55　　　　　　　　　　60

Gln Leu Ile Asp Ala His Gln Leu Gln Ala His Val Asp Lys Met Pro
65　　　　　　　　　　70　　　　　　　　　　75　　　　　　　　　　80

Leu Leu Ser Cys Gln Phe Leu Lys Gly His Arg Glu Gln Arg Leu Ala
　　　　　　　　　　85　　　　　　　　　　90　　　　　　　　　　95

His Leu Val Leu Ser Phe Leu Thr Met Gly Tyr Val Trp Gln Glu Gly
　　　　　　　　　100　　　　　　　　　105　　　　　　　　　110

Glu Ala Gln Pro Ala Glu Val Leu Pro Arg Asn Leu Ala Leu Pro Phe
　　　　　　　　　115　　　　　　　　　120　　　　　　　　　125

Val Glu Val Ser Arg Asn Leu Gly Leu Pro Pro Ile Leu Val His Ser
　　　　130　　　　　　　　　135　　　　　　　　　140

Asp Leu Val Leu Thr Asn Trp Thr Lys Lys Asp Pro Asp Gly Asp Gly
145　　　　　　　　　150　　　　　　　　　155　　　　　　　　　160

Val Ser Leu Cys Leu Pro Gly Trp Ser Ala Val Ala
　　　　　　　　　165　　　　　　　　　170

<210> 3874

<211> 135

<212> PRT

<213> Homo sapiens


<400> 3874

Met Glu Leu Ser Val Leu Asp Ser Leu Asn Ala Arg Met Ala Arg Pro

●

```
     1                  5                  10                 15
Gln Gly Ser Ser Val His Asp Gly Val Pro Val Pro Phe Gln Leu Pro
                    20                 25                 30
Pro Gly Val Ser Asn Glu Ala Gln Tyr Val Phe Thr Ile Gln Ser Ile
               35                 40                 45
Val Met Ala Gln Lys Leu Lys Gly Thr Leu Ser Phe Ile Ala Lys Asn
           50                 55                 60
Asp Glu Gly Ala Thr His Glu Lys Leu Asp Phe Arg Leu His Phe Ser
   65                 70                 75                 80
Cys Ser Ser Tyr Leu Ile Thr Thr Pro Cys Tyr Arg Trp Gly Pro Gly
                    85                 90                 95
Pro Leu Pro Tyr Val Pro Glu Pro Pro Pro Pro Leu Tyr Leu Ala
                   100                105                110
Asp Thr Cys Ala Pro Gly Thr Glu Ala Ser Gly Gln Asp Phe Arg Asp
               115                120                125
Gly Phe Gly Gly Ala Gly Ser
               130                135
```

●

<210> 3875

<211> 514

<212> PRT

<213> Homo sapiens


<400> 3875

```
Met Ser Val Leu Gly Glu Tyr Glu Arg His Cys Asp Ser Ile Asn Ser
   1                  5                  10                 15
Asp Phe Gly Ser Glu Ser Gly Gly Cys Gly Asp Ser Ser Pro Gly Pro
                    20                 25                 30
```

Ser Ala Ser Gln Gly Pro Arg Ala Gly Gly Ala Phe Gly Glu Ala
         35          40          45

Thr Leu Tyr Arg Arg Thr Glu Asp Asp Ser Leu Val Val Trp Lys Glu
     50          55          60

Val Asp Leu Thr Arg Leu Ser Glu Lys Glu Arg Arg Asp Ala Leu Asn
65          70          75             80

Glu Ile Val Ile Leu Ala Leu Leu Gln His Asp Asn Ile Ile Ala Tyr
          85          90          95

Tyr Asn His Phe Met Asp Asn Thr Thr Leu Leu Ile Glu Leu Glu Tyr
         100        105        110

Cys Asn Gly Gly Asn Leu Tyr Asp Lys Ile Leu Arg Gln Lys Asp Lys
        115        120        125

Leu Phe Glu Glu Glu Met Val Val Trp Tyr Leu Phe Gln Ile Val Ser
      130         135        140

Ala Val Ser Cys Ile His Lys Ala Gly Ile Leu His Arg Asp Ile Lys
145         150         155         160

Thr Leu Asn Ile Phe Leu Thr Lys Ala Asn Leu Ile Lys Leu Gly Asp
        165        170        175

Tyr Gly Leu Ala Lys Lys Leu Asn Ser Glu Tyr Ser Met Ala Glu Thr
        180        185        190

Leu Val Gly Thr Pro Tyr Tyr Met Ser Pro Glu Leu Cys Gln Gly Val
      195        200        205

Lys Tyr Asn Phe Lys Ser Asp Ile Trp Ala Val Gly Cys Val Ile Phe
     210         215        220

Glu Leu Leu Thr Leu Lys Arg Thr Phe Asp Ala Thr Asn Pro Leu Asn
225         230         235         240

Leu Cys Val Lys Ile Val Gln Gly Ile Arg Ala Met Glu Val Asp Ser
        245        250        255

Ser Gln Tyr Ser Leu Glu Leu Ile Gln Met Val His Ser Cys Leu Asp

```
                260                 265                 270
Gln Asp Pro Glu Gln Arg Pro Thr Ala Asp Glu Leu Leu Asp Arg Pro
                275                 280                 285
Leu Leu Arg Lys Arg Arg Arg Glu Met Glu Glu Lys Val Thr Leu Leu
                290                 295                 300
Asn Ala Pro Thr Lys Arg Pro Arg Ser Ser Thr Val Thr Glu Ala Pro
305                 310                 315                 320
Ile Ala Val Val Thr Ser Arg Thr Ser Glu Val Tyr Val Trp Gly Gly
                    325                 330                 335
Gly Lys Ser Thr Pro Gln Lys Leu Asp Val Ile Lys Ser Gly Cys Ser
                    340                 345                 350
Ala Arg Gln Val Cys Ala Gly Asn Thr His Phe Ala Val Val Thr Val
                355                 360                 365
Glu Lys Glu Leu Tyr Thr Trp Val Asn Met Gln Gly Gly Thr Lys Leu
                370                 375                 380
His Gly Gln Leu Gly His Gly Asp Lys Ala Ser Tyr Arg Gln Pro Lys
385                 390                 395                 400
His Val Glu Lys Leu Gln Gly Lys Ala Ile Arg Gln Val Ser Cys Gly
                    405                 410                 415
Asp Asp Phe Thr Val Cys Val Thr Asp Glu Gly Gln Leu Tyr Ala Phe
                420                 425                 430
Gly Ser Asp Tyr Tyr Gly Cys Met Gly Val Asp Lys Val Ala Gly Pro
                435                 440                 445
Glu Val Leu Glu Pro Met Gln Leu Asn Phe Phe Leu Ser Asn Pro Val
                450                 455                 460
Glu Gln Val Ser Cys Gly Asp Asn His Val Val Val Leu Thr Arg Asn
465                 470                 475                 480
Lys Glu Val Tyr Ser Trp Gly Cys Gly Glu Tyr Gly Arg Gly Ser Leu
                    485                 490                 495
```

Val Ser Val His Phe Phe Thr Gly Ile Gln Pro Asp Phe Lys Val Val
　　　　　　　500　　　　　　　　505　　　　　　　510
Cys Ile

<210> 3876

<211> 291

<212> PRT

<213> Homo sapiens

<400> 3876

Met Arg Ala Tyr Val Tyr Ser Tyr Ala Arg Ile Cys Met His Met Tyr
1　　　　　　　5　　　　　　　　10　　　　　　　15

Ile His Ile His Ala Tyr Ala Cys Met Cys Ile Phe Ile Tyr Thr His
　　　　　　　20　　　　　　　25　　　　　　　30

Met His Ala Cys Val Tyr Ser Cys Thr Arg Ile Cys Ile His Met Tyr
　　　　　　　35　　　　　　　40　　　　　　　45

Ile His Met His Ala Tyr Ala Tyr Ile Cys Ile Phe Ile Cys Thr His
　　　　　　　50　　　　　　　55　　　　　　　60

Met His Thr Tyr Val Tyr Ser Tyr Thr Arg Ile Cys Ile His Met Tyr
65　　　　　　　70　　　　　　　75　　　　　　　80

Val His Ile His Ala Tyr Ala Tyr Ile Cys Ile Phe Ile Tyr Thr His
　　　　　　　85　　　　　　　90　　　　　　　95

Met His Thr Tyr Met Tyr Ile His Met His Ala Tyr Ala Tyr Ile Tyr
　　　　　　　100　　　　　　　105　　　　　　　110

Val Tyr Ser Tyr Thr Arg Ile Cys Ile His Ile Cys Ile Phe Ile Cys
　　　　　　　115　　　　　　　120　　　　　　　125

Thr His Met His Thr Tyr Met Cys Ile His Met Tyr Thr Cys Ile His

```
              130                    135                    140
Ile Cys Val Phe Met Cys Thr Met His Ala Tyr Val Tyr Ser Tyr Val
145                    150                    155                    160
His Met His Ala Tyr Val Cys Val His Met Tyr Thr Cys Val His Met
                   165                    170                    175
Cys Ile His Lys Tyr Thr Cys Met His Met Cys Ile His Met Tyr Thr
                   180                    185                    190
Cys Ile His Arg Cys Ile Phe Ile Tyr Thr Tyr Val Tyr Ile Cys Val
                   195                    200                    205
Tyr Ile His Ile Tyr Ile Cys Ile His Val Cys Val Tyr Ser Tyr Ile
              210                    215                    220
His Met Tyr Thr Tyr Val Tyr Ile His Val Tyr Ile Gly Ile His Met
225                    230                    235                    240
Cys Val Tyr Ser Tyr Met His Arg Tyr Thr Tyr Val Tyr Ile His Ile
                   245                    250                    255
Cys Ile Cys Val His Ile Tyr Thr His Ile His Ile His Thr His Asn
                   260                    265                    270
Phe Asn His Leu Ser Ile Asp Glu His Ser Leu Phe Leu Tyr Leu Gly
              275                    280                    285
Tyr Trp Glu
         290
```

<210> 3877

<211> 227

<212> PRT

<213> Homo sapiens


<400> 3877

Met Glu Gly His Arg Cys Gly Ala Gly Thr Cys Pro Val Leu Pro Thr
1               5                   10                  15

Ser Pro Pro Pro Ser Pro His Leu Arg Leu Pro Thr Glu Leu Ser Val
            20                  25                  30

Ala Gln Cys Thr Gln Arg Pro Val Asp Ile Val Phe Leu Leu Asp Gly
            35                  40                  45

Ser Glu Arg Leu Gly Glu Gln Asn Phe His Lys Ser Arg Arg Phe Val
        50                  55                  60

Glu Gln Val Ala Arg Arg Leu Thr Leu Ala Arg Arg Asp Asp Asp Pro
65                  70                  75                  80

Leu Asn Ala Arg Val Ala Leu Leu Gln Phe Gly Gly Pro Gly Glu Gln
                85                  90                  95

Gln Val Ala Phe Pro Leu Ser His Asn Leu Thr Ala Ile His Glu Ala
            100                 105                 110

Leu Glu Thr Thr Gln Tyr Leu Asn Ser Phe Ser His Val Gly Ala Gly
        115                 120                 125

Val Val His Ala Ile Asn Ala Ile Val Arg Ser Pro Arg Gly Gly Ala
        130                 135                 140

Arg Arg His Ala Glu Leu Ser Phe Val Phe Leu Thr Asp Gly Val Thr
145                 150                 155                 160

Gly Asn Asp Ser Leu His Glu Ser Ala His Ser Met Arg Lys Gln Asn
            165                 170                 175

Val Val Pro Thr Val Leu Ala Leu Gly Ser Asp Val Asp Met Asp Val
            180                 185                 190

Leu Thr Thr Leu Ser Leu Gly Asp Arg Ala Ala Val Phe His Glu Lys
        195                 200                 205

Asp Tyr Asp Ser Leu Ala Gln Pro Gly Phe Phe Asp Arg Phe Ile Arg
210                 215                 220

Trp Ile Cys

225

<210> 3878

<211> 698

<212> PRT

<213> Homo sapiens

<400> 3878

Met Leu Pro Ala Arg Leu Pro Phe Arg Leu Leu Ser Leu Phe Leu Arg
1               5                   10                  15

Gly Ser Ala Pro Thr Ala Ala Arg His Gly Leu Arg Glu Pro Leu Leu
            20                  25                  30

Glu Arg Arg Cys Ala Ala Ala Ser Ser Phe Gln His Ser Ser Ser Leu
        35                  40                  45

Gly Arg Glu Leu Pro Tyr Asp Pro Val Asp Thr Glu Gly Phe Gly Glu
    50                  55                  60

Gly Gly Asp Met Gln Glu Arg Phe Leu Phe Pro Glu Tyr Ile Leu Asp
65                  70                  75                  80

Pro Glu Pro Gln Pro Thr Arg Glu Lys Gln Leu Gln Glu Leu Gln Gln
                85                  90                  95

Gln Gln Glu Glu Glu Glu Arg Gln Arg Gln Gln Arg Arg Glu Glu Arg
            100                 105                 110

Arg Gln Gln Asn Leu Arg Ala Arg Ser Arg Glu His Pro Val Val Gly
        115                 120                 125

His Pro Asp Pro Ala Leu Pro Pro Ser Gly Val Asn Cys Ser Gly Cys
    130                 135                 140

Gly Ala Glu Leu His Cys Gln Asp Ala Gly Val Pro Gly Tyr Leu Pro
145                 150                 155                 160

Arg Glu Lys Phe Leu Arg Thr Ala Glu Ala Asp Gly Gly Leu Ala Arg
                165                170                175

Thr Val Cys Gln Arg Cys Trp Leu Leu Ser His His Arg Arg Ala Leu
                180                185                190

Arg Leu Gln Val Ser Arg Glu Gln Tyr Leu Glu Leu Val Ser Ala Ala
                195                200                205

Leu Arg Arg Pro Gly Pro Ser Leu Val Leu Tyr Met Val Asp Leu Leu
                210                215                220

Asp Leu Pro Asp Ala Leu Leu Pro Asp Leu Pro Ala Leu Val Gly Pro
225                230                235                240

Lys Gln Leu Ile Val Leu Gly Asn Lys Val Asp Leu Leu Pro Gln Asp
                245                250                255

Ala Pro Gly Tyr Arg Gln Arg Leu Arg Glu Arg Leu Trp Glu Asp Cys
                260                265                270

Ala Arg Ala Gly Leu Leu Leu Ala Pro Gly His Gln Gly Pro Gln Arg
                275                280                285

Pro Val Lys Asp Glu Pro Gln Asp Gly Glu Asn Pro Asn Pro Pro Asn
                290                295                300

Trp Ser Arg Thr Val Val Arg Asp Val Arg Leu Ile Ser Ala Lys Thr
305                310                315                320

Gly Tyr Gly Val Glu Glu Leu Ile Ser Ala Leu Gln Arg Ser Trp Arg
                325                330                335

Tyr Arg Gly Asp Val Tyr Leu Val Gly Ala Thr Asn Ala Gly Lys Ser
                340                345                350

Thr Leu Phe Asn Thr Leu Leu Glu Ser Asp Tyr Cys Thr Ala Lys Gly
                355                360                365

Ser Glu Ala Ile Asp Arg Ala Thr Ile Ser Pro Trp Pro Gly Thr Thr
370                375                380

Leu Asn Leu Leu Lys Phe Pro Ile Cys Asn Pro Thr Pro Tyr Arg Met

```
385                390                395                400
Phe Lys Arg His Gln Arg Leu Lys Lys Asp Ser Thr Gln Ala Glu Glu
                405                410                415
Asp Leu Ser Glu Gln Glu Gln Asn Gln Leu Asn Val Leu Lys Lys His
                420                425                430
Gly Tyr Val Val Gly Arg Val Gly Arg Thr Phe Leu Tyr Ser Glu Glu
                435                440                445
Gln Lys Asp Asn Ile Pro Phe Glu Phe Asp Ala Asp Ser Leu Ala Phe
                450                455                460
Asp Met Glu Asn Asp Pro Val Met Gly Thr His Lys Ser Thr Lys Gln
465                470                475                480
Val Glu Leu Thr Ala Gln Asp Val Lys Asp Ala His Trp Phe Tyr Asp
                485                490                495
Thr Pro Gly Leu Thr Lys Glu Asn Cys Ile Leu Asn Leu Leu Thr Glu
                500                505                510
Lys Glu Val Asn Ile Val Leu Pro Thr Gln Ser Ile Val Pro Arg Thr
                515                520                525
Phe Val Leu Lys Pro Gly Met Val Leu Phe Leu Gly Ala Ile Gly Arg
                530                535                540
Ile Asp Phe Leu Gln Gly Asn Gln Ser Ala Trp Phe Thr Val Val Ala
545                550                555                560
Ser Asn Ile Leu Pro Val His Ile Thr Ser Leu Asp Arg Ala Asp Ala
                565                570                575
Leu Tyr Gln Lys His Ala Gly His Thr Leu Leu Gln Ile Pro Met Gly
                580                585                590
Gly Lys Glu Arg Met Ala Gly Phe Pro Pro Leu Val Ala Glu Asp Ile
                595                600                605
Met Leu Lys Glu Gly Leu Gly Ala Ser Glu Ala Val Ala Asp Ile Lys
610                615                620
```

Phe Ser Ser Ala Gly Trp Val Ser Val Thr Pro Asn Phe Lys Asp Arg
625             630             635             640

Leu His Leu Arg Gly Tyr Thr Pro Glu Gly Thr Val Leu Thr Val Arg
                645             650             655

Pro Pro Leu Leu Pro Tyr Ile Val Asn Ile Lys Gly Gln Arg Ile Lys
                660             665             670

Lys Ser Val Ala Tyr Lys Thr Lys Lys Pro Pro Ser Leu Met Tyr Asn
                675             680             685

Val Arg Lys Lys Lys Gly Lys Ile Asn Val
            690             695


<210> 3879

<211> 211

<212> PRT

<213> Homo sapiens


<400> 3879

Met Leu Ala Ala Ala Arg Arg Leu Cys Pro Cys Cys Glu Leu His Arg
1               5               10              15

Ala Arg Gly Ser Gly Asp Lys Gln Glu Pro Ser Ser Phe Gln Val Gly
                20              25              30

Gly Trp Glu Leu Pro Arg His Ser Cys Ser Cys Pro Ser His Gly Cys
                35              40              45

Trp Leu Ser Leu Pro Val Phe Leu Glu Thr Arg Ser Arg Gln Glu Pro
            50              55              60

Cys Ser Pro Gly Cys Asn Cys Ser His Pro Ser Pro Cys Tyr Arg Pro
65              70              75              80

Cys Ser Trp Arg Leu Gly Ala Gly Arg Ser Ala Lys Ala Gly Arg Ser

```
                85                  90                  95
Ala Gly Ala Gly Met Ser Pro Ser Cys Ile Pro His Leu Leu Cys Ala
               100                 105                 110
Ala Val Ala Thr Gln Val Val Ala Ala Asp Gln Pro Gly Tyr Leu Cys
          115                 120                 125
Thr Leu Gly Ala Trp Glu Gly Thr Pro Thr Ser Ala Gly Leu Glu Val
         130                 135                 140
Ser Ala Ser Ala Ala Trp Pro Leu Pro Ala Pro Gly Asp Cys Ser Asp
145                 150                 155                 160
Leu Gly Ala Arg Leu Gly Pro Ser Gln Gly Ala Val Ala Ala Gln Pro
               165                 170                 175
Val Ala Arg Ile Leu Glu Ala Val Leu Thr Gly His Ser Ser Ala Ala
          180                 185                 190
Ser Ala Pro Ser Arg Leu Trp Val Leu Thr Asn Ile Glu Gly Arg Leu
         195                 200                 205
Arg Glu Gly
    210
```

<210> 3880

<211> 263

<212> PRT

<213> Homo sapiens


<400> 3880

```
Met Ile Gly Tyr Thr Leu Lys Tyr Val Ala Phe Asn Gly Thr Lys Val
1               5                   10                  15
Gly Lys Gln Ile Val Glu Asn Phe Ser Pro Asn Gln Thr Lys Phe Thr
          20                  25                  30
```

Val Gln Arg Thr Asp Pro Val Ser Arg Tyr Arg Phe Thr Leu Ser Ala
              35                  40                  45

Arg Thr Gln Val Gly Ser Gly Glu Ala Val Thr Glu Glu Ser Pro Ala
              50                  55                  60

Pro Pro Asn Glu Gly Asn His Thr Lys Lys Thr Val Pro Val Lys Ala
  65                  70                  75                  80

Gln Ala Gln Pro Ile Gln Leu Thr Asp Leu Tyr Pro Gly Met Thr Tyr
                  85                  90                  95

Thr Leu Arg Val Tyr Ser Arg Asp Asn Glu Gly Ile Ser Ser Thr Val
                 100                 105                 110

Ile Thr Phe Met Thr Ser Thr Ala Tyr Thr Asn Asn Gln Ala Asp Ile
                 115                 120                 125

Ala Thr Gln Gly Trp Phe Ile Gly Leu Met Cys Ala Ile Ala Leu Leu
                 130                 135                 140

Val Leu Ile Leu Leu Ile Val Cys Phe Ile Lys Arg Ser Arg Gly Gly
145                 150                 155                 160

Lys Tyr Pro Val Arg Glu Lys Lys Asp Val Pro Leu Gly Pro Glu Asp
                 165                 170                 175

Pro Lys Glu Glu Asp Gly Ser Phe Asp Tyr Ser Asp Glu Asp Asn Lys
                 180                 185                 190

Pro Leu Gln Gly Ser Gln Thr Ser Leu Asp Gly Thr Ile Lys Gln Gln
                 195                 200                 205

Glu Ser Asp Asp Ser Leu Val Asp Tyr Gly Glu Gly Gly Glu Gly Gln
                 210                 215                 220

Phe Asn Glu Asp Gly Ser Phe Ile Gly Gln Tyr Thr Val Lys Lys Asp
225                 230                 235                 240

Lys Glu Glu Thr Glu Gly Asn Glu Ser Ser Glu Ala Thr Ser Pro Val
                 245                 250                 255

Asn Ala Ile Tyr Ser Leu Ala

260

<210> 3881

<211> 615

<212> PRT

<213> Homo sapiens

<400> 3881

Met Asn Val Arg Ile Leu Gly Arg His Leu Val Phe Pro Phe Ile Phe
1               5                   10                  15

Ile Val Ile Lys Glu Leu Thr Leu Glu Gly Thr Pro Met Asn Val Asn
            20                  25                  30

Asn Leu Glu Asn Pro Leu Asp Ala Pro Gln Asn Phe Lys Cys Met Gln
            35                  40                  45

Gly Leu Ser Val Glu Lys Pro Tyr Lys Cys Lys Lys Cys Glu Lys Ala
        50                  55                  60

Phe Asn Asn Leu Ser Ser Phe Gln Ile His Glu Arg Met His Arg Gly
65                  70                  75                  80

Gly Lys Tyr His Ala Cys Lys Gly Ser Gly Asn Thr Tyr Arg Phe Ser
                85                  90                  95

Gly Phe Tyr His Arg His Lys Met Pro His Ala Gly Gly Lys Phe Tyr
                100                 105                 110

Gly Cys Lys Lys Cys Gly Lys Ala Phe Ile Ser Phe Cys Ala Phe Arg
            115                 120                 125

Tyr His Gln Arg Thr His Thr Lys Glu Lys Pro Tyr Ala Cys Lys Gln
        130                 135                 140

Cys Gly Lys Ala Tyr Ile Ser Tyr Thr Ser Phe Gln Tyr His Gln Leu
145                 150                 155                 160

●.

Asn His Thr Gly Ala Lys Cys Tyr Glu Cys Lys Gln Cys Gly Lys Gly
　　　　　　　　　165　　　　　　　　170　　　　　　　　175

Phe Asp Leu Pro Asn Ser Ile Arg Tyr His Glu Met Thr His Thr Gly
　　　　　　　　　180　　　　　　　　185　　　　　　　　190

Glu Lys Pro His Glu Cys Lys Gln Cys Gly Lys Thr Phe Arg Cys Ala
　　　　　　　　　195　　　　　　　　200　　　　　　　　205

Ser Ser Leu Arg Ile His Gly Arg Thr His Thr Gly Glu Lys Pro Tyr
　　　　　　　　　210　　　　　　　　215　　　　　　　　220

Glu Cys Lys Gln Cys Gly Lys Val Ser Arg Tyr Trp Ser Gly Leu Gln
225　　　　　　　　230　　　　　　　　235　　　　　　　　240

Val His Glu Val Thr His Ile Gly Lys Lys Leu Tyr Glu Cys Lys Glu
　　　　　　　　　245　　　　　　　　250　　　　　　　　255

Cys Gly Lys Ser Tyr Tyr Ser Ser Gly Ser Phe Leu Asn His Lys Arg
　　　　　　　　　260　　　　　　　　265　　　　　　　　270

Ile His Thr Arg Glu Lys Ser Tyr Glu Cys Lys Glu Cys Gly Lys Ala
　　　　　　　　　275　　　　　　　　280　　　　　　　　285

Phe Gly Asn Pro Ile Ser Phe Gln Lys His Glu Gly Ser His Arg Lys
　　　　　　　　　290　　　　　　　　295　　　　　　　　300

Trp Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Val Phe Ser Phe Ser
305　　　　　　　　310　　　　　　　　315　　　　　　　　320

Ser Ser Leu Arg Arg His Glu Arg Thr His Thr Glu Lys Leu Cys Glu
　　　　　　　　　325　　　　　　　　330　　　　　　　　335

Cys Lys Gln His Gly Lys Gly Phe Phe His Arg Ser Cys Pro Arg His
　　　　　　　　　340　　　　　　　　345　　　　　　　　350

Met Lys Ile Asp Thr Gly Glu Ile Leu His Lys Arg Lys Ile Arg Gly
　　　　　　　　　355　　　　　　　　360　　　　　　　　365

Lys Val Phe His Ser Pro Ser Ser Phe Gln Thr Cys Glu Arg Ser His
　　　　　　　　　370　　　　　　　　375　　　　　　　　380

Thr Arg Glu Lys Arg Tyr Lys Cys Lys Gln Cys Gly Lys Pro Phe Ile

```
      385                 390                 395                 400
Tyr Phe Asn Ala Phe Gln Arg His Gln Arg Ser His Thr Gly Glu Asn
                    405                 410                 415
Pro Tyr Glu Cys Lys Gln Cys Gly Lys Ala Cys Ile Ser Ser Thr Ala
                    420                 425                 430
Phe Gln Cys Arg Glu Leu Ser His Thr Gly Ala Lys Arg Tyr Lys Cys
                435                 440                 445
Lys Gln Cys Gly Lys Gly Phe Asn Leu Pro Ser Ser Ile Arg Tyr His
                450                 455                 460
Glu Met Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Gln Cys Gly
465                 470                 475                 480
Arg Ala Phe Arg Ser Ala Ser His Leu Arg Thr His Glu Arg Thr His
                    485                 490                 495
Ile Gly Glu Lys Pro Tyr Glu Cys Lys Gln Cys Gly Lys Val Tyr Arg
                    500                 505                 510
Tyr Trp Ser Gly Leu Arg Ile His Gly Leu Thr His Ile Gly Lys Lys
                515                 520                 525
Pro Tyr Glu Phe Asn Asp Arg Gly Lys Ser Phe Tyr Ser Ser Asn Phe
                530                 535                 540
Phe Leu Asn His Lys Arg Val His Thr Arg Val Lys Thr Tyr Glu Cys
545                 550                 555                 560
Lys Glu Cys Gly Lys Ala Phe Asp Asn Pro Thr Ser Phe Gln Lys His
                565                 570                 575
Glu Gly Ser His Arg Lys Gly Lys Ser Tyr Glu Cys Lys Glu Cys Gly
                580                 585                 590
Lys Val Phe Ser Phe Ser Arg Ser Phe Arg Arg Tyr Glu Arg Ala His
                595                 600                 605
Thr Gly Glu Lys Pro Cys Glu
610                 615
```

<210> 3882

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3882

Met Ile Tyr Pro Leu Ile Val Leu Pro Leu Cys Ala Ser Trp His Trp
1               5                  10                  15

Gly Leu Ile Arg Lys Gly Ile Val Leu Phe Trp Gly Glu Ser Val Lys
                20                  25                  30

Tyr Phe Leu Asp Asn Leu Asp Arg Ile Gly Gln Leu Asn Tyr Phe Pro
                35                  40                  45

Ser Lys Gln Asp Ile Leu Leu Ala Arg Lys Ala Thr Lys Gly Ile Val
            50                  55                  60

Glu His Asp Phe Val Ile Lys Lys Ile Pro Phe Lys Met Ala Asp Val
65                  70                  75                  80

Gly Gly Gln Arg Ser Gln Arg Gln Lys Trp Phe Gln Cys Phe Asp Gly
                85                  90                  95

Ile Thr Ser Ile Leu Phe Met Val Ser Ser Ser Glu Tyr Asp Gln Val
                100                 105                 110

Leu Met Glu Asp Arg Arg Thr Asn Arg Leu Val Glu Ser Met Asn Ile
            115                 120                 125

Phe Glu Thr Ile Val Asn Asn Lys Leu Phe Phe Asn Val Ser Ile Ile
            130                 135                 140

Leu Phe Leu Asn Lys Met Asp Leu Leu Val Glu Lys Val Lys Thr Val
145                 150                 155                 160

Ser Ile Lys Lys His Phe Pro Asp Phe Arg Gly Asp Pro His Arg Leu

```
                165                   170                   175
Glu Asp Val Gln Arg Tyr Leu Val Gln Cys Phe Asp Arg Lys Arg Arg
                180                   185                   190
Asn Arg Ser Lys Pro Leu Phe His His Phe Thr Thr Ala Ile Asp Thr
            195                   200                   205
Glu Asn Val Arg Phe Val Phe His Ala Val Lys Asp Thr Ile Leu Gln
        210                   215                   220
Glu Asn Leu Lys Asp Ile Met Leu Gln
225                   230
```

<210> 3883

<211> 119

<212> PRT

<213> Homo sapiens


<400> 3883

```
Met Ala Ser Ser Thr Leu Arg Ile Gln Ser Thr Thr Ser Thr Pro Ser
1                   5                   10                  15
Gly Trp Ala Gln Cys Leu Cys Asn Arg Gly His Cys Leu Phe Phe Phe
                20                  25                  30
Phe Ser Arg Ser Asn Gln Leu Cys His Arg Gly Tyr Leu Leu Ser Tyr
            35                  40                  45
Gly Arg Gly Val Ser Asn Lys Asn His Glu Gly Glu Gln Leu Ser Ala
        50                  55                  60
Leu Leu Gly Ile Ala Leu Thr Ser Trp Lys Asp Leu Arg Cys Phe Cys
65                  70                  75                  80
Arg Val Leu Gly Leu Gly Thr Leu His His Ile Lys Ala Val Glu His
                85                  90                  95
```

Gly Thr Gly Val Val Lys Arg His His Gly Gly His Val Leu Leu Leu
　　　　　　　100　　　　　　　　　105　　　　　　　　　110

Leu Val Phe Gln Ser His Val
　　　　　　　115

<210> 3884

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3884

Met Gly Leu Val Leu Glu Arg Arg Leu Cys Phe Ala Leu Gly Lys Val
1　　　　　　　　5　　　　　　　　10　　　　　　　　15

Glu Ser Cys Glu Lys Glu Cys Glu Trp Leu Gly Leu Met Val Arg Val
　　　　　　　20　　　　　　　　　25　　　　　　　　　30

Gly Phe Val Cys Ser Arg Val Arg Ser Leu Phe Phe Pro Trp Glu Lys
　　　　　　　35　　　　　　　　　40　　　　　　　　　45

Gly Phe Val Phe Leu Val Gln Glu Leu Glu Asp Leu Ala Arg Arg Ala
　　　　　50　　　　　　　　　55　　　　　　　　　60

Phe Gln Pro His Ser Leu Phe Thr Cys Phe Trp Ser Leu Gly Leu Ser
65　　　　　　　　70　　　　　　　　75　　　　　　　　80

Ser Leu Glu Cys Thr Glu Pro Trp His Pro Trp Phe Gly Val Pro Gln
　　　　　　　85　　　　　　　　　90　　　　　　　　　95

Met Gly Gln Ala His Ser Gln Ser Cys Ala Gly Glu Ser Ser Ser Ala
　　　　　　　100　　　　　　　　105　　　　　　　　110

Cys Thr Leu Pro Ala Leu Glu Met Arg Pro Leu Glu Lys Gly Gly Leu
　　　　　　　115　　　　　　　　120　　　　　　　　125

Asp Ser Gly Glu Gly Thr Pro Val Leu Gly Pro Gly Gln

●

　　　130　　　　　　　　　135　　　　　　　　　140

<210> 3885

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3885

●
Met Pro Lys Arg Ser Cys Pro Phe Ala Asp Val Ala Pro Leu Gln Leu

　1　　　　　　　　　5　　　　　　　　　10　　　　　　　　　15

Lys Val Arg Val Ser Gln Arg Glu Leu Ser Arg Gly Val Cys Ala Glu

　　　　　　　　　20　　　　　　　　　25　　　　　　　　　30

Arg Tyr Ser Gln Glu Val Phe Glu Lys Thr Lys Arg Leu Leu Phe Leu

　　　　　　35　　　　　　　　　40　　　　　　　　　45

Gly Ala Gln Ala Tyr Leu Asp His Val Trp Asp Glu Gly Cys Ala Val

　　　　　　50　　　　　　　　　55　　　　　　　　　60

Val His Leu Pro Glu Ser Pro Lys Pro Gly Pro Thr Gly Ala Pro Arg

65　　　　　　　　　70　　　　　　　　　75　　　　　　　　　80

●
Ala Ala Arg Gly Gln Met Leu Ile Gly Pro Asp Gly Arg Leu Ile Arg

　　　　　　　　　85　　　　　　　　　90　　　　　　　　　95

Ser Leu Gly Gln Ala Ser Glu Ala Gly Glu Trp His Gln Gln Pro Phe

　　　　　　　　　100　　　　　　　　105　　　　　　　　110

Val Ala Val Ala Leu Arg Ala Gly Gly Gly Thr Ser Ile Phe Leu Asp

　　　　　　115　　　　　　　　120　　　　　　　　125

Leu Gln Gly Gln Ala Phe Pro Pro Trp Val Ser Arg Thr Leu Thr Gln

　　　　　　130　　　　　　　　135　　　　　　　　140

Ser Leu Ala Phe Trp Leu Arg Arg Leu Leu Leu Ser Gly Gly Leu Thr

145　　　　　　　　150　　　　　　　　155　　　　　　　　160

●

Phe Lys Thr Gly Ser Cys

　　　　　165


<210> 3886

<211> 159

<212> PRT

<213> Homo sapiens


● <400> 3886

Met Lys Leu Ala Leu Gln Met Pro Pro Ala Gln Trp His Leu Ile Gln

1　　　　　　　　5　　　　　　　　　　10　　　　　　　　　15

Asp Pro Thr Gly Gly Gly Leu Glu Gly Glu Arg Pro Glu Asp Trp Glu

　　　　　　　20　　　　　　　　　25　　　　　　　　30

Glu Leu Ala Asp Pro Gly Ala Leu Ser Pro Ser Arg Tyr Phe Pro Gly

　　　　　35　　　　　　　　　40　　　　　　　　　45

Ser Asn Leu Leu Pro His Lys Thr His Pro Pro Pro Tyr Ser Pro

　　　50　　　　　　　　55　　　　　　　　60

Ala Pro Ala Gln His Gly Ser Ser Phe Lys Pro Gly Leu Ala Ser Arg

65　　　　　　　　70　　　　　　　　75　　　　　　　　80

Cys Ser Gln Val Cys Val Gly Pro Gly Ser Ala Leu Ser Pro Ala Ala

　　　　　　　85　　　　　　　　90　　　　　　　　95

Ala Ser Gly His Leu Ala Cys Ser Pro Cys Leu Arg Leu Gln Gln Pro

　　　　　100　　　　　　　　105　　　　　　　　110

Asn Glu Ile Ser Leu Pro Ala Pro Ala Gly Pro His Leu Pro Pro Pro

　　　　　115　　　　　　　　120　　　　　　　　125

Thr Ala Leu His Ser His Gln Leu Phe Trp Glu Pro Pro Thr Ala Pro

　　　130　　　　　　　　135　　　　　　　　140

Ala Cys His Leu Thr Pro Ile Thr Val Gly Pro Val Arg Gly Arg

145                 150                 155


<210> 3887

<211> 586

<212> PRT

<213> Homo sapiens


<400> 3887

Met Asp Ser Pro Pro Leu Lys Ala Leu Asn Ser Asn Ser Ile Tyr Phe
1               5                   10                  15

Leu Leu Leu Phe His Cys Met Leu Ile Ser Glu Val Gln Ile Glu His
                20                  25                  30

Asp Pro Glu Leu Glu Lys Glu Ser Pro Gly Leu Lys Asn Ser Pro Ile
                35                  40                  45

Asp Glu Ser Glu Val Gln Thr Ala Thr Asp Ser Pro Ser Val Lys Pro
            50                  55                  60

Asn Glu Leu Glu Glu Glu Ser Thr Pro Ser Ile Gln Thr Glu Thr Leu
65                  70                  75                  80

Val Gln Gln Glu Glu Pro Cys Glu Glu Glu Ala Glu Lys Ala Thr Cys
                    85                  90                  95

Asp Ser Asp Phe Ala Val Glu Thr Leu Glu Leu Glu Thr Gln Gly Glu
                100                 105                 110

Glu Val Lys Glu Glu Ile Pro Leu Val Ala Ser Ala Ser Val Ser Ile
                115                 120                 125

Glu Gln Phe Thr Glu Asn Ala Glu Glu Cys Ala Leu Asn Gln Gln Met
            130                 135                 140

Phe Asn Ser Asp Leu Glu Lys Lys Gly Ala Glu Ile Ile Asn Pro Lys
145                 150                 155                 160

Thr Ala Leu Leu Pro Ser Asp Ser Val Phe Ala Glu Glu Arg Asn Leu
　　　　　　　　　　165　　　　　　　　170　　　　　　　　175

Lys Gly Ile Leu Glu Glu Ser Pro Ser Glu Ala Glu Asp Phe Ile Ser
　　　　　　　　　　180　　　　　　　　185　　　　　　　　190

Gly Ile Thr Gln Thr Met Val Glu Ala Val Ala Glu Val Glu Lys Asn
　　　　　　　　　　195　　　　　　　　200　　　　　　　　205

Glu Thr Val Ser Glu Ile Leu Pro Ser Thr Cys Ile Val Thr Leu Val
　　　　　　　　　　210　　　　　　　　215　　　　　　　　220

Pro Gly Ile Pro Thr Gly Asp Glu Lys Thr Val Asp Lys Lys Asn Ile
225　　　　　　　　　　230　　　　　　　　235　　　　　　　　240

Ser Glu Lys Lys Gly Asn Met Asp Glu Lys Glu Glu Lys Glu Phe Asn
　　　　　　　　　　245　　　　　　　　250　　　　　　　　255

Thr Lys Glu Thr Arg Met Asp Leu Gln Ile Gly Thr Glu Lys Ala Glu
　　　　　　　　　　260　　　　　　　　265　　　　　　　　270

Lys Asn Glu Gly Arg Met Asp Ala Glu Lys Val Glu Lys Met Ala Ala
　　　　　　　　　　275　　　　　　　　280　　　　　　　　285

Met Lys Glu Lys Pro Ala Glu Asn Thr Leu Phe Lys Ala Tyr Pro Asn
　　　　　　　　　　290　　　　　　　　295　　　　　　　　300

Lys Gly Val Gly Gln Ala Asn Lys Pro Asp Glu Thr Ser Lys Thr Ser
305　　　　　　　　　　310　　　　　　　　315　　　　　　　　320

Ile Leu Ala Val Ser Asp Val Ser Ser Ser Lys Pro Ser Ile Lys Ala
　　　　　　　　　　325　　　　　　　　330　　　　　　　　335

Val Ile Val Ser Ser Pro Lys Ala Lys Ala Thr Val Ser Lys Thr Glu
　　　　　　　　　　340　　　　　　　　345　　　　　　　　350

Asn Gln Lys Ser Phe Pro Lys Ser Val Pro Arg Asp Gln Ile Asn Ala
　　　　　　　　　　355　　　　　　　　360　　　　　　　　365

Glu Lys Lys Leu Ser Ala Lys Glu Phe Gly Leu Leu Lys Pro Thr Ser
　　　　　　　　　　370　　　　　　　　375　　　　　　　　380

Ala Arg Ser Gly Leu Ala Glu Ser Ser Ser Lys Phe Lys Pro Thr Gln

385                    390                    395                    400
Ser Ser Leu Thr Arg Gly Gly Ser Gly Arg Ile Ser Ala Leu Gln Gly
                    405                    410                    415
Lys Leu Ser Lys Leu Asp Tyr Arg Asp Ile Thr Lys Gln Ser Gln Glu
                    420                    425                    430
Thr Glu Ala Arg Pro Ser Ile Met Lys Arg Asp Asp Ser Asn Asn Lys
            435                    440                    445
Thr Leu Ala Glu Gln Asn Thr Lys Asn Pro Lys Ser Thr Thr Gly Arg
            450                    455                    460
Ser Ser Lys Ser Lys Glu Glu Pro Leu Phe Pro Phe Asn Leu Asp Glu
465                    470                    475                    480
Phe Val Thr Val Asp Glu Val Ile Glu Glu Val Asn Pro Ser Gln Ala
                    485                    490                    495
Lys Gln Asn Pro Leu Lys Gly Lys Arg Lys Glu Thr Leu Lys Asn Val
            500                    505                    510
Pro Phe Ser Glu Leu Asn Leu Lys Lys Lys Lys Gly Lys Thr Ser Thr
            515                    520                    525
Pro Arg Gly Val Glu Gly Glu Leu Ser Phe Val Thr Leu Asp Glu Ile
            530                    535                    540
Gly Glu Glu Glu Asp Ala Ala Ala His Leu Ala Gln Ala Leu Val Thr
545                    550                    555                    560
Val Asp Glu Val Ile Asp Glu Glu Glu Leu Asn Met Glu Glu Met Val
                    565                    570                    575
Lys Lys Phe Lys Phe Thr Phe Tyr Ile Arg
            580                    585


<210> 3888

<211> 160

<212> PRT

<213> Homo sapiens


<400> 3888

```
Met Glu Thr Phe Ser Cys Lys Gly Tyr Gly Gly Thr Pro Ala Ile Gly
1               5                   10                  15
Ile Ser Pro Cys Leu Leu Gln His Gly Asn Arg Leu Arg Asp Leu Pro
                20                  25                  30
Gly Leu Ser Arg Ala Thr Ser Glu Cys Lys Gly Lys Glu Cys Ser Ser
            35                  40                  45
Arg Lys Gly Met Cys Leu Ser Ser His His Leu Arg Ala Arg Pro Val
        50                  55                  60
Pro Gly Ser Ala Gly Phe Leu His Gln His Gly Leu Phe Ile Ser Asn
65                  70                  75                  80
His Trp Glu Gly Met Cys Ala Glu Ser Cys Gln Asp Gly Lys Ala His
                85                  90                  95
Val Pro Ile Leu Thr Ala Ala Glu Arg Lys Met Ala Ala Glu Gly Lys
                100                 105                 110
Gln Gln Gln Lys Glu Lys Phe Asp Ser Asp Gly Leu Arg Gly Gln Trp
            115                 120                 125
Gln Ala Ile Leu Val His Val Ser Cys Ile Ser Asp Arg Val Leu Leu
        130                 135                 140
Cys Cys Pro Gly Trp Ser Ala Val Ala Gln Ser Trp Leu Thr Glu Gly
145                 150                 155                 160
```


<210> 3889

<211> 119

<212> PRT

●

<213> Homo sapiens


<400> 3889

Met Thr Glu Asp Phe Leu Pro Val Leu Arg Glu Tyr Ile Leu Tyr Ser
1               5                   10                  15

Asp Ser Met Lys Ser Val Leu Lys Lys Arg Asp Gln Val Gln Ala Glu
                20                  25                  30

Tyr Glu Ala Lys Leu Glu Ala Val Ala Leu Arg Lys Glu Asp Arg Pro
                35                  40                  45

Lys Val Pro Ala Asp Val Glu Lys Cys Gln Asp Arg Met Glu Cys Phe
        50                  55                  60

Asn Ala Asp Leu Lys Ala Asp Met Glu Arg Trp Gln Asn Asn Lys Arg
65                  70                  75                  80

Gln Asp Phe Arg Gln Leu Leu Met Gly Met Ala Asp Lys Asn Ile Gln
                85                  90                  95

Tyr Tyr Glu Lys Cys Leu Met Ala Trp Glu Ser Ile Ile Pro Leu Leu
                100                 105                 110

Gln Glu Lys Gln Glu Ala Lys
                115


●


<210> 3890

<211> 206

<212> PRT

<213> Homo sapiens


<400> 3890

Met His Pro Ser Ile His Ser Ser Ile Asp Leu Phe Ile His Leu Phe
1               5                   10                  15

Ile Leu Pro Ser Ile His Leu Tyr Ile His Leu Ser Phe His Leu Pro
　　　　　　　20　　　　　　　　　25　　　　　　　　　30

Ile Tyr Tyr Phe Ile His Pro Ser Ile Pro Leu Ser Leu His Pro Thr
　　　　　　　35　　　　　　　　　40　　　　　　　　　45

Ile Leu Ile Ser Thr His Leu Phe Ala His Thr Ser Ile His Pro Thr
　　　　　　　50　　　　　　　　　55　　　　　　　　　60

Ile His Pro Ser Ala His Ser Ser Asn His Ala His Ile Leu Ala Phe
65　　　　　　　　　70　　　　　　　　　75　　　　　　　　　80

Ile His Leu Ser Leu Leu Ser Ser Ile His Thr Ser Ile His Pro Pro
　　　　　　　　　85　　　　　　　　　90　　　　　　　　　95

Ile His Pro Ser Thr His Pro Ser Ile His Leu Cys Ile His Ser Ser
　　　　　　　　100　　　　　　　　105　　　　　　　　110

Ile His Pro Tyr Ile His Leu Ser Ile Gln Pro Ser Ser Gln Pro Ser
　　　　　　　　115　　　　　　　　120　　　　　　　　125

Ile His Pro Ser Ile His Pro Tyr Ile His Pro Ser Ile His Pro Pro
　　　　　　　130　　　　　　　　135　　　　　　　　140

Ile Tyr Pro Ser Ile His Pro Ser Ile His Leu Pro Ile Tyr Pro Ser
145　　　　　　　　150　　　　　　　　155　　　　　　　　160

Ile His Pro Pro Ile Tyr Pro Cys Ile His Pro Ser Ile Ile Tyr Pro
　　　　　　　　165　　　　　　　　170　　　　　　　　175

Phe Thr His Ser Pro Ile His Pro Ser Ile Ile Tyr Pro Phe Thr His
　　　　　　　　180　　　　　　　　185　　　　　　　　190

Pro Ser Ile His Ser Pro Ile His Pro Ile Cys Leu Tyr Gln
　　　　　　　195　　　　　　　　200　　　　　　　　205

<210> 3891

<211> 403

<212> PRT

<213> Homo sapiens

<400> 3891

Met Ser Ala Pro Ser Ser Thr Gly Pro Gln Tyr Cys Pro Gly Leu Pro
1                 5                   10                  15

Ser Arg Lys Glu Ala Thr Pro Glu Gly Arg Pro Glu Thr Cys Leu Leu
                20                  25                  30

Pro Ser Ser Pro Gln Ala Gln Arg Pro Ile Gln Gly Leu Glu Gln Arg
                35                  40                  45

Ala Asp Gly Glu Arg Cys Trp Ala Ala Gly Trp Pro Arg Asp Gly Gly
            50                  55                  60

Arg Ser Ser Pro Gly Gly Gln Asp Glu Gly Gly Gly Ser Trp Pro Leu
65                  70                  75                  80

Glu Glu Val Val Leu Leu Val Ser Ile Ser Ser Ser Val Gln Glu Gly
                85                  90                  95

Glu Lys Tyr Pro His Pro Cys Ala Ala Arg His Arg Thr Pro Ser Leu
                100                 105                 110

Arg Ser Pro Asp Gln Pro Pro Pro Cys Pro Gln Phe Met Ala Gln Gly
                115                 120                 125

Lys Thr Gly Ser Ser Ser Pro Pro Gly Gly Pro Pro Lys Pro Gly Ser
                130                 135                 140

Gln Leu Asp Ser Met Leu Gly Ser Leu Gln Ser Asp Leu Asn Lys Leu
145                 150                 155                 160

Gly Val Ala Thr Val Ala Lys Gly Val Cys Gly Ala Cys Lys Lys Pro
                165                 170                 175

Ile Ala Gly Gln Val Val Thr Ala Met Gly Lys Thr Trp His Pro Glu
                180                 185                 190

His Phe Val Cys Thr His Cys Gln Glu Glu Ile Gly Ser Arg Asn Phe
                195                 200                 205

Phe Glu Arg Asp Gly Gln Pro Tyr Cys Glu Lys Asp Tyr His Asn Leu
    210             215             220

Phe Ser Pro Arg Cys Tyr Tyr Cys Asn Gly Pro Ile Leu Asp Lys Val
225             230             235             240

Val Thr Ala Leu Asp Arg Thr Trp His Pro Glu His Phe Phe Cys Ala
            245             250             255

Gln Cys Gly Ala Phe Phe Gly Pro Glu Gly Phe His Glu Lys Asp Gly
            260             265             270

Lys Ala Tyr Cys Arg Lys Asp Tyr Phe Asp Met Phe Ala Pro Lys Cys
            275             280             285

Gly Gly Cys Ala Arg Ala Ile Leu Glu Asn Tyr Ile Ser Ala Leu Asn
    290             295             300

Thr Leu Trp His Pro Glu Cys Phe Val Cys Arg Glu Cys Phe Thr Pro
305             310             315             320

Phe Val Asn Gly Ser Phe Phe Glu His Asp Gly Gln Pro Tyr Cys Glu
            325             330             335

Val His Tyr His Glu Arg Arg Gly Ser Leu Cys Ser Gly Cys Gln Lys
            340             345             350

Pro Ile Thr Gly Arg Cys Ile Thr Ala Met Ala Lys Lys Phe His Pro
    355             360             365

Glu His Phe Val Cys Ala Phe Cys Leu Lys Gln Leu Asn Lys Gly Thr
    370             375             380

Phe Lys Glu Gln Asn Asp Lys Pro Tyr Cys Gln Asn Cys Phe Leu Glu
385             390             395             400

Leu Phe Cys

<210> 3892

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3892

Met Gly Gln Gly Gly Gly His Thr Ser Gln Ser Leu Thr Ser Cys Gly
1               5                   10                  15

Ser Arg Pro Leu Ala Ala Ala Val Gly Ala Arg Ile Arg Leu Trp Glu
                20                  25                  30

Ala Pro Ala Trp Leu Thr Pro Pro Val Pro Val Cys Leu Cys Ala Ser
                35                  40                  45

Thr Gln Pro Ala Leu Pro Lys Ala Arg Ala Val Ala Pro Lys Pro Ser
                50                  55                  60

Ser Arg Gly Glu Tyr Val Val Ala Lys Leu Asp Asp Leu Val Asn Trp
65                  70                  75                  80

Ala Arg Arg Ser Ser Leu Trp Pro Met Thr Phe Gly Leu Ala Cys Cys
                85                  90                  95

Ala Val Glu Met Met His Met Ala Ala Pro Arg Tyr Asp Met Asp Arg
                100                 105                 110

Phe Gly Val Val Phe Arg Ala Ser Pro Arg Gln Ser Asp Val Met Ile
                115                 120                 125

Val Ala Gly Thr Leu Thr Asn Lys Met Ala Pro Ala Leu Arg Lys Val
                130                 135                 140

Gly Leu Val Pro Ala Ala Gln Pro Pro Glu
145                 150                 155

<210> 3893

<211> 121

●

<212> PRT

<213> Homo sapiens

.

<400> 3893

Met Asn Lys Tyr Val Ile Asn Gly Thr Tyr Ala Asn Glu Thr Lys Leu
1               5                   10                  15

Lys Ile Thr Gln Leu Leu Glu Glu Asp Gly Gly Phe Tyr Trp Cys His
            20                  25                  30

Ala Leu Phe Gln Leu Asp Glu Ser Glu Glu His Ile Glu Leu Val Val
●               35                  40                  45

Leu Ser Tyr Leu Val Pro Leu Lys Pro Phe Leu Ala Ile Val Ala Glu
        50                  55                  60

Val Ile Leu Leu Val Ala Thr Ile Leu Leu Cys Glu Lys Tyr Thr Gln
65                  70                  75                  80

Lys Lys Lys Lys His Ser Asp Glu Gly Lys Glu Phe Glu Gln Ile Glu
                85                  90                  95

Gln Leu Lys Ser Asp Asp Ser Asn Gly Ile Glu Asn Asn Val Pro Arg
                100                 105                 110

His Arg Lys Asn Glu Ser Leu Gly Gln
●               115                 120

<210> 3894

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3894

Met Ser Leu Met Ser Val Thr Met Ser Phe Leu Ile Cys Ala Pro Gly

```
          1               5                10                15
Glu Gly Gly Cys Gly Glu Asp Pro Val Cys Arg His Cys Val Pro Trp
                 20                25                30
Gln Ser Arg Gly Ala Pro Cys Gly Trp Pro Ala Lys Val Tyr Val Pro
                 35                40                45
Leu Arg Ala Glu Gly Lys Arg Gln Pro Arg Ser Cys Ala Ser Arg His
                 50                55                60
Leu Met Gly His Val Ser Gln Ile Cys Lys Ser Lys Ile Leu Ala Ser
     65                70                75                80
Tyr Leu Leu Cys Arg Ile Asn Asn Phe Asn Asn Asn Gly Asn Trp Val
                      85                90                95
Met Asp Gly Thr Ala Ala Ile Arg Leu
                     100               105
```

<210> 3895

<211> 491

<212> PRT

<213> Homo sapiens


<400> 3895

```
Met Ala Ile Pro Lys His Ser Leu Ser Pro Val Pro Trp Glu Glu Asp
     1               5                10                15
Ser Phe Leu Gln Val Lys Val Glu Glu Glu Glu Glu Ala Ser Leu Ser
                 20                25                30
Gln Gly Gly Glu Ser Ser His Asp His Ile Ala His Ser Glu Ala Ala
                 35                40                45
Arg Leu Arg Phe Arg His Phe Arg Tyr Glu Glu Ala Ser Gly Pro His
     50                55                60
```

Glu Ala Leu Ala His Leu Arg Ala Leu Cys Cys Gln Trp Leu Gln Pro
65              70              75              80

Glu Ala His Ser Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu Gln
                85              90              95

Phe Leu Gly Ala Leu Pro Pro Glu Ile Gln Ala Trp Val Gly Ala Gln
                100             105             110

Ser Pro Lys Ser Gly Glu Glu Ala Ala Val Leu Val Glu Asp Leu Thr
                115             120             125

Gln Val Leu Asp Lys Arg Gly Trp Asp Pro Gly Ala Glu Pro Thr Glu
                130             135             140

Ala Ser Cys Lys Gln Ser Asp Leu Gly Glu Ser Glu Pro Ser Asn Val
145             150             155             160

Thr Glu Thr Leu Met Gly Gly Val Ser Leu Gly Pro Ala Phe Val Lys
                165             170             175

Ala Cys Glu Pro Glu Gly Ser Ser Glu Arg Ser Gly Leu Ser Gly Glu
                180             185             190

Ile Trp Thr Lys Ser Val Thr Gln Gln Ile His Phe Lys Lys Thr Ser
                195             200             205

Gly Pro Tyr Lys Asp Val Pro Thr Asp Gln Arg Gly Arg Glu Ser Gly
210             215             220

Ala Ser Arg Asn Ser Ser Ser Ala Trp Pro Asn Leu Thr Ser Gln Glu
225             230             235             240

Lys Pro Pro Ser Glu Asp Lys Phe Asp Leu Val Asp Ala Tyr Gly Thr
                245             250             255

Glu Pro Pro Tyr Thr Tyr Ser Gly Lys Arg Ser Ser Lys Cys Arg Glu
                260             265             270

Cys Arg Lys Met Phe Gln Ser Ala Ser Ala Leu Glu Ala His Gln Lys
                275             280             285

Thr His Ser Arg Lys Thr Pro Tyr Ala Cys Ser Glu Cys Gly Lys Ala

```
          290              295              300
Phe Ser Arg Ser Thr His Leu Ala Gln His Gln Val Val His Thr Gly
305              310              315              320
Ala Lys Pro His Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser Arg Val
                 325              330              335
Thr His Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
                 340              345              350
Lys Cys Gly Glu Cys Gly Lys Thr Phe Ser Arg Ser Thr His Leu Thr
                 355              360              365
Gln His Gln Arg Val His Thr Gly Glu Arg Pro Tyr Glu Cys Asp Ala
     370              375              380
Cys Gly Lys Ala Phe Ser Gln Ser Thr His Leu Thr Gln His Gln Arg
385              390              395              400
Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asp Ala Cys Gly Arg Ala
                 405              410              415
Phe Ser Asp Cys Ser Ala Leu Ile Arg His Leu Arg Ile His Ser Gly
                 420              425              430
Glu Lys Pro Tyr Gln Cys Lys Val Cys Pro Lys Ala Phe Ala Gln Ser
                 435              440              445
Ser Ser Leu Ile Glu His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
     450              455              460
Lys Cys Ser Asp Cys Gly Lys Ala Phe Ser Arg Ser Ser Ala Leu Met
465              470              475              480
Val His Leu Arg Ile His Ile Thr Val Leu Gln
          485              490
```

<210> 3896

<211> 213

<212> PRT

<213> Homo sapiens


<400> 3896

| Met | Gly | Cys | Met | Val | Gly | Ala | Asp | Val | Leu | Val | Gly | Arg | His | Gln | Gly |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Ala Gly Glu Asn Lys Leu Val Gly Asp Leu Leu Val Leu Gly Gly Ala
            20                  25                  30

Thr Leu Tyr Gly Ile Ser Asn Val Trp Glu Glu Tyr Ile Ile Arg Thr
          35                  40                  45

Leu Ser Arg Val Glu Phe Leu Gly Met Ile Gly Leu Phe Gly Ala Phe
        50                  55                  60

Phe Ser Gly Ile Gln Leu Ala Ile Met Glu His Lys Glu Leu Leu Lys
65                  70                  75                  80

Val Pro Trp Asp Trp Gln Ile Gly Leu Leu Tyr Val Gly Phe Ser Ala
          85                  90                  95

Cys Met Phe Gly Leu Tyr Ser Phe Met Pro Val Val Ile Lys Lys Thr
            100                 105               110

Ser Ala Thr Ser Val Asn Leu Ser Leu Leu Thr Ala Asp Leu Tyr Ser
            115                 120               125

Leu Phe Cys Gly Leu Phe Leu Phe His Tyr Lys Phe Ser Gly Leu Tyr
            130                 135               140

Leu Leu Ser Phe Phe Thr Ile Leu Ile Gly Leu Val Leu Tyr Ser Ser
145                  150                  155                  160

Thr Ser Thr Tyr Ile Ala Gln Asp Pro Arg Val Tyr Lys Gln Phe Arg
            165                 170               175

Asn Pro Ser Gly Pro Val Val Asp Leu Pro Thr Thr Ala Gln Val Glu
            180                 185               190

Pro Ser Val Thr Tyr Thr Ser Leu Gly Gln Glu Thr Glu Glu Glu Pro

```
                195                 200                 205
His Val Arg Val Ala
                210
```

<210> 3897

<211> 410

<212> PRT

<213> Homo sapiens


<400> 3897

```
Met Gly Pro Met Gln Leu Ala Ala Pro Leu Trp Thr Ser Val Ser Ser
1                   5                   10                  15
Pro Val Glu Trp Val Pro Val Val Ser Pro Ser Gln Gly Ser Leu Gly
                20                  25                  30
Arg Ser Arg Leu His Thr Ala Met Val Ile Arg Leu Leu Leu Pro His
                35                  40                  45
Ser Phe Leu Arg Ala Ser Arg Pro Ser Ala Met Thr His Glu Ala Pro
            50                  55                  60
Lys Leu Ser Pro Lys Val Asp Arg Leu Cys Leu Leu Asn Arg Pro Leu
65                  70                  75                  80
Ser Leu His Leu Gln Ser Pro His Ser Ser Pro Leu Ala Pro Ala Ala
                85                  90                  95
Ala Pro Ser Asp Pro Arg Leu Gln Asp Leu Lys Ala Arg Glu Ala Glu
                100                 105                 110
Ala Trp Glu Glu Pro Thr Glu Leu Leu Gly Leu Pro Ser Ala Leu Ala
                115                 120                 125
Gly Met Gln Asp Leu Arg Leu Glu Gly Ala Leu His Leu Leu Leu Ala
                130                 135                 140
```

Gln Gln Gln Leu Arg Ala Arg Ala Arg Ala Gly Ser Val Arg Pro Arg
145             150             155             160

Gly Gln Pro Thr Pro Gly Glu Met Leu Pro Ser Leu Pro Val Gly Ser
                165             170             175

Asp Ser Glu Gly Pro Glu Asn Glu Gly Thr Arg Ala Ala Leu Ala Ala
                180             185             190

Ala Gly Leu Ser Gly Gly Arg His Thr Gln Pro Ala Gly Pro Gly Arg
                195             200             205

Ala Gln Arg Thr Glu Ala Ala Ala Thr Gln Asp Cys Ala Leu Asp Lys
                210             215             220

Pro Leu Asp Leu Ser Glu Trp Gly Arg Ala Arg Gly Gln Asp Thr Pro
225             230             235             240

Lys Pro Ala Gly Gln His Gly Ser Leu Ser Pro Ala Ala Ala His Thr
                245             250             255

Ala Ser Pro Glu Pro Pro Thr Gln Ser Gly Pro Leu Thr Arg Ser Pro
                260             265             270

Gln Ala Leu Ser Asn Gly Thr Lys Gly Thr Arg Val Pro Glu Gln Glu
                275             280             285

Glu Ala Ser Thr Pro Met Asp Pro Ser Arg Pro Leu Pro Gly Ser Gln
                290             295             300

Leu Ser Leu Ser Ser Pro Gly Ser Thr Glu Asp Glu Asp Thr Gly Arg
305             310             315             320

Pro Leu Pro Pro Pro His Pro Gln Pro Pro His Pro Gln Pro Pro
                325             330             335

Asp Leu Asp Gly His Pro Gly Thr Val Ser Thr Trp Gly Gln Ser Pro
                340             345             350

Ala Gly Arg Cys Phe Pro His Gly Glu Arg Gly Trp Trp Ser Val Pro
                355             360             365

Thr Arg Ser Gly Cys Leu Gln Ala Gln Leu Cys Pro Ala Asp Leu Thr

●

```
        370              375              380
Gly Gln Pro Gln Ala Pro Gly Leu Gly Ser Ser Thr Cys Arg His Arg
385              390              395              400
Arg Lys Pro Arg Ala Trp Gln Glu Pro Leu
                    405              410
```

<210> 3898

<211> 584

●

<212> PRT

<213> Homo sapiens

<400> 3898

```
Met Ala Asp Glu Ala Leu Ala Gly Leu Asp Glu Gly Ala Leu Arg Lys
  1               5               10              15
Leu Leu Glu Val Thr Ala Asp Leu Ala Glu Arg Arg Arg Ile Arg Ser
                    20              25              30
Ala Ile Arg Glu Leu Gln Arg Gln Glu Leu Glu Ser Met Asn Asp Val
                    35              40              45
```

●

```
Glu Glu Leu Thr Ala Leu Leu Arg Ser Ala Gly Glu Tyr Glu Glu Arg
            50              55              60
Lys Leu Ile Arg Ala Ala Ile Arg Arg Val Arg Ala Gln Glu Ile Glu
 65              70              75              80
Ala Ala Thr Leu Ala Gly Arg Leu Tyr Ser Gly Arg Pro Asn Ser Gly
                    85              90              95
Ser Arg Glu Asp Ser Lys Gly Leu Ala Ala His Arg Leu Glu Gln Cys
                    100             105             110
Glu Val Pro Glu Arg Glu Glu Gln Glu Gln Gln Ala Glu Val Ser Lys
            115             120             125
```

Pro Thr Pro Thr Pro Glu Gly Thr Ser Gln Asp Val Thr Thr Val Thr
130               135               140

Leu Leu Leu Arg Ala Pro Pro Gly Ser Thr Ser Ser Ser Pro Ala Ser
145               150               155               160

Pro Ser Ser Ser Pro Thr Pro Ala Ser Pro Glu Pro Pro Leu Glu Pro
            165               170               175

Ala Glu Ala Gln Cys Leu Thr Ala Glu Val Pro Gly Ser Pro Glu Pro
            180               185               190

Pro Pro Ser Pro Pro Lys Thr Thr Ser Pro Glu Pro Gln Glu Ser Pro
            195               200               205

Thr Leu Pro Ser Thr Glu Gly Gln Val Val Asn Lys Leu Leu Ser Gly
        210               215               220

Pro Lys Glu Thr Pro Ala Ala Gln Ser Pro Thr Arg Gly Pro Ser Asp
225               230               235               240

Thr Lys Arg Ala Asp Val Ala Gly Pro Arg Pro Cys Gln Arg Ser Leu
            245               250               255

Ser Val Leu Ser Pro Arg Gln Pro Ala Gln Asn Arg Glu Ser Thr Pro
            260               265               270

Leu Ala Ser Gly Pro Ser Ser Phe Gln Arg Ala Gly Ser Val Arg Asp
        275               280               285

Arg Val His Lys Phe Thr Ser Asp Ser Pro Met Ala Ala Arg Leu Gln
        290               295               300

Asp Gly Thr Pro Gln Ala Ala Leu Ser Pro Leu Thr Pro Ala Arg Leu
305               310               315               320

Leu Gly Pro Ser Leu Thr Ser Thr Thr Pro Ala Ser Ser Ser Ser Gly
            325               330               335

Ser Ser Ser Arg Gly Pro Ser Gly Thr Ser Ser Arg Phe Ser Lys Glu
            340               345               350

Gln Arg Gly Val Ala Gln Pro Leu Ala Gln Leu Arg Ser Cys Pro Gln

```
                355                    360                    365
Glu Glu Gly Pro Arg Gly Arg Gly Leu Ala Ala Arg Pro Leu Glu Asn
       370                    375                    380
Arg Ala Gly Gly Pro Val Ala Arg Ser Glu Glu Pro Gly Ala Pro Leu
385                    390                    395                    400
Pro Val Ala Val Gly Thr Ala Glu Pro Gly Gly Ser Met Lys Thr Thr
                405                    410                    415
Phe Thr Ile Glu Ile Lys Asp Gly Arg Gly Gln Ala Ser Thr Gly Arg
                420                    425                    430
Val Leu Leu Pro Thr Gly Asn Gln Arg Ala Glu Leu Thr Leu Gly Leu
       435                    440                    445
Arg Ala Pro Pro Thr Leu Leu Ser Thr Ser Ser Gly Gly Lys Ser Thr
       450                    455                    460
Ile Thr Arg Val Asn Ser Pro Gly Thr Leu Ala Arg Leu Gly Ser Val
465                    470                    475                    480
Thr His Val Thr Ser Phe Ser His Ala Pro Pro Ser Ser Arg Gly Gly
                485                    490                    495
Cys Ser Ile Lys Met Glu Pro Glu Pro Ala Glu Pro Leu Ala Ala Ala
                500                    505                    510
Val Glu Ala Ala Asn Gly Ala Glu Gln Thr Arg Val Asn Lys Ala Pro
       515                    520                    525
Glu Gly Arg Ser Pro Leu Ser Ala Glu Glu Leu Met Thr Ile Glu Asp
       530                    535                    540
Glu Gly Val Leu Asp Lys Met Leu Asp Gln Ser Thr Asp Phe Glu Glu
545                    550                    555                    560
Arg Lys Leu Ile Arg Ala Ala Leu Arg Glu Leu Arg Gln Arg Lys Arg
                565                    570                    575
Gly Arg Glu Pro Val Ala Leu Pro
       580
```

<210> 3899

<211> 1001

<212> PRT

<213> Homo sapiens

<400> 3899

Met Asn Ser Tyr Ser Asp Ser Gly Tyr Gln Glu Ala Gly Ser Phe His
1               5                   10                  15

Asn Ser Gln Asn Val Ser Lys Ala Asp Asn Arg Gln Gln His Ser Phe
                20                  25                  30

Ile Gly Ser Thr Asn Asn His Val Val Arg Asn Ser Arg Ala Glu Gly
                35                  40                  45

Gln Thr Leu Val Gln Pro Ser Val Ala Asn Arg Ala Met Arg Arg Val
            50                  55                  60

Ser Ser Val Pro Ser Arg Ala Gln Ser Pro Ser Tyr Val Ile Ser Thr
65                  70                  75                  80

Gly Val Ser Pro Ser Arg Gly Ser Leu Arg Thr Ser Leu Gly Ser Gly
                85                  90                  95

Phe Gly Ser Pro Ser Val Thr Asp Pro Arg Pro Leu Asn Pro Ser Ala
                100                 105                 110

Tyr Ser Ser Thr Thr Leu Pro Ala Ala Arg Ala Ala Ser Pro Tyr Ser
            115                 120                 125

Gln Arg Pro Ala Ser Pro Thr Ala Ile Arg Arg Ile Gly Ser Val Thr
            130                 135                 140

Ser Arg Gln Thr Ser Asn Pro Asn Gly Pro Thr Pro Gln Tyr Gln Thr
145                 150                 155                 160

Thr Ala Arg Val Gly Ser Pro Leu Thr Leu Thr Asp Ala Gln Thr Arg

                    165                 170                 175
Val Ala Ser Pro Ser Gln Gly Gln Val Gly Ser Ser Ser Pro Lys Arg
              180                 185                 190
Ser Gly Met Thr Ala Val Pro Gln His Leu Gly Pro Ser Leu Gln Arg
              195                 200                 205
Thr Val His Asp Met Glu Gln Phe Gly Gln Gln Gln Tyr Asp Ile Tyr
          210                 215                 220
Glu Arg Met Val Pro Pro Arg Pro Asp Ser Leu Thr Gly Leu Arg Ser
225                 230                 235                 240
Ser Tyr Ala Ser Gln His Ser Gln Leu Gly Gln Asp Leu Arg Ser Ala
                    245                 250                 255
Val Ser Pro Asp Leu His Ile Thr Pro Ile Tyr Glu Gly Arg Thr Tyr
              260                 265                 270
Tyr Ser Pro Val Tyr Arg Ser Pro Asn His Gly Thr Val Glu Leu Gln
              275                 280                 285
Gly Ser Gln Thr Ala Leu Tyr Arg Thr Gly Ser Val Gly Ile Gly Asn
          290                 295                 300
Leu Gln Arg Thr Ser Ser Gln Arg Ser Thr Leu Thr Tyr Gln Arg Asn
305                 310                 315                 320
Asn Tyr Ala Leu Asn Thr Thr Ala Thr Tyr Ala Glu Pro Tyr Arg Pro
                    325                 330                 335
Ile Gln Tyr Arg Val Gln Glu Cys Asn Tyr Asn Arg Leu Gln His Ala
              340                 345                 350
Val Pro Ala Asp Asp Gly Thr Thr Arg Ser Pro Ser Ile Asp Ser Ile
              355                 360                 365
Gln Lys Asp Pro Arg Glu Phe Ala Trp Arg Asp Pro Glu Leu Pro Glu
          370                 375                 380
Val Ile His Met Leu Gln His Gln Phe Pro Ser Val Gln Ala Asn Ala
385                 390                 395                 400

Ala Ala Tyr Leu Gln His Leu Cys Phe Gly Asp Asn Lys Val Lys Met
            405         410         415

Glu Val Cys Arg Leu Gly Gly Ile Lys His Leu Val Asp Leu Leu Asp
            420         425         430

His Arg Val Leu Glu Val Gln Lys Asn Ala Cys Gly Ala Leu Arg Asn
            435         440         445

Leu Val Phe Gly Lys Ser Thr Asp Glu Asn Lys Ile Ala Met Lys Asn
            450         455         460

Val Gly Gly Ile Pro Ala Leu Leu Arg Leu Leu Arg Lys Ser Ile Asp
465         470         475         480

Ala Glu Val Arg Glu Leu Val Thr Gly Val Leu Trp Asn Leu Ser Ser
            485         490         495

Cys Asp Ala Val Lys Met Thr Ile Ile Arg Asp Ala Leu Ser Thr Leu
            500         505         510

Thr Asn Thr Val Ile Val Pro His Ser Gly Trp Asn Asn Ser Ser Phe
            515         520         525

Asp Asp Asp His Lys Ile Lys Phe Gln Thr Ser Leu Val Leu Arg Asn
            530         535         540

Thr Thr Gly Cys Leu Arg Asn Leu Ser Ser Ala Gly Glu Glu Ala Arg
545         550         555         560

Lys Gln Met Arg Ser Cys Glu Gly Leu Val Asp Ser Leu Leu Tyr Val
            565         570         575

Ile His Thr Cys Val Asn Thr Ser Asp Tyr Asp Ser Lys Thr Val Glu
            580         585         590

Asn Cys Val Cys Thr Leu Arg Asn Leu Ser Tyr Arg Leu Glu Leu Glu
            595         600         605

Val Pro Gln Ala Arg Leu Leu Gly Leu Asn Glu Leu Asp Asp Leu Leu
            610         615         620

Gly Lys Glu Ser Pro Ser Lys Asp Ser Glu Pro Ser Cys Trp Gly Lys

625               630             635             640

Lys Lys Lys Lys Lys Lys Arg Thr Pro Gln Glu Asp Gln Trp Asp Gly

           645           650           655

Val Gly Pro Ile Pro Gly Leu Ser Lys Ser Pro Lys Gly Val Glu Met

           660           665           670

Leu Trp His Pro Ser Val Val Lys Pro Tyr Leu Thr Leu Leu Ala Glu

           675           680           685

Ser Ser Asn Pro Ala Thr Leu Glu Gly Ser Ala Gly Ser Leu Gln Asn

           690           695           700

Leu Ser Ala Gly Asn Trp Lys Phe Ala Ala Tyr Ile Arg Ala Ala Val

705               710             715             720

Arg Lys Glu Lys Gly Leu Pro Ile Leu Val Glu Leu Leu Arg Met Asp

           725           730           735

Asn Asp Arg Val Val Ser Ser Val Ala Thr Ala Leu Arg Asn Met Ala

           740           745           750

Leu Asp Val Arg Asn Lys Glu Leu Ile Gly Lys Tyr Ala Met Arg Asp

           755           760           765

Leu Val Asn Arg Leu Pro Gly Gly Asn Gly Pro Ser Val Leu Ser Asp

           770           775           780

Glu Thr Met Ala Ala Ile Cys Cys Ala Leu His Glu Val Thr Ser Lys

785               790             795             800

Asn Met Glu Asn Ala Lys Ala Leu Ala Asp Ser Gly Gly Ile Glu Lys

           805           810           815

Leu Val Asn Ile Thr Lys Gly Arg Gly Asp Gly Ser Ser Leu Lys Val

           820           825           830

Val Lys Ala Ala Ala Gln Val Leu Asn Thr Leu Trp Gln Tyr Arg Asp

           835           840           845

Leu Arg Ser Ile Tyr Lys Lys Asp Gly Trp Asn Gln Asn His Phe Ile

           850           855           860

Thr Pro Val Ser Thr Leu Glu Arg Asp Arg Phe Lys Ser His Pro Ser
865              870              875              880

Leu Ser Thr Thr Asn Gln Gln Met Ser Pro Ile Ile Gln Ser Gly Ser
                 885              890              895

Ser Lys Pro Ser Pro Ile Tyr Ile Ser Ser Tyr Ser Ser Pro Ala Arg
                 900              905              910

Glu Gln Asn Arg Arg Leu Gln His Gln Gln Leu Tyr Tyr Ser Gln Asp
             915              920              925

Asp Ser Asn Arg Lys Asn Phe Asp Ala Tyr Arg Leu Tyr Leu Gln Ser
             930              935              940

Pro His Ser Tyr Glu Asp Pro Tyr Phe Asp Asp Arg Val His Phe Pro
945              950              955              960

Ala Ser Thr Asp Tyr Ser Thr Gln Tyr Gly Leu Lys Ser Thr Thr Asn
                 965              970              975

Tyr Val Asp Phe Tyr Ser Thr Lys Arg Pro Ser Tyr Arg Ala Glu Gln
                 980              985              990

Tyr Pro Gly Ser Pro Asp Ser Trp Val
                 995              1000

<210> 3900

<211> 250

<212> PRT

<213> Homo sapiens

<400> 3900

Met Cys His Asn Val Phe Ile Val Glu Ser Val Cys Val Gly Trp Phe
1               5                10               15

Ser Leu Glu Phe Leu Leu Arg Leu Ile Gln Ala Pro Ser Lys Phe Ala

```
                  20                    25                    30
Phe Leu Arg Ser Pro Leu Thr Leu Ile Asp Leu Val Ala Ile Leu Pro
                  35                    40                    45
Tyr Tyr Ile Thr Leu Leu Val Asp Gly Ala Ala Ala Gly Arg Arg Lys
                  50                    55                    60
Pro Gly Ala Gly Asn Ser Tyr Leu Asp Lys Val Gly Leu Val Leu Arg
65                    70                    75                    80
Val Leu Gln Ala Leu Arg Ile Leu Tyr Val Met Arg Leu Ala Arg His
                      85                    90                    95
Ser Leu Gly Leu Gln Thr Leu Gly Leu Thr Ala Arg Arg Cys Thr Arg
                      100                   105                   110
Glu Phe Gly Leu Leu Leu Leu Phe Leu Cys Val Ala Ile Ala Leu Phe
                  115                   120                   125
Ala Pro Leu Leu Tyr Val Ile Glu Asn Glu Met Ala Asp Ser Pro Glu
                  130                   135                   140
Phe Thr Ser Ile Pro Ala Cys Tyr Trp Trp Ala Val Ile Thr Met Thr
145                   150                   155                   160
Thr Val Gly Tyr Gly Asp Met Val Pro Arg Ser Thr Pro Gly Gln Val
                  165                   170                   175
Val Ala Leu Ser Ser Ile Leu Ser Gly Ile Leu Leu Met Ala Phe Pro
                  180                   185                   190
Val Thr Ser Ile Phe His Thr Phe Ser Arg Ser Tyr Leu Glu Leu Lys
                  195                   200                   205
Gln Glu Gln Glu Arg Val Met Phe Arg Arg Ala Gln Phe Leu Ile Lys
                  210                   215                   220
Thr Lys Ser Gln Leu Ser Val Ser Gln Asp Ser Asp Ile Leu Phe Gly
225                   230                   235                   240
Ser Ala Ser Ser Asp Thr Arg Asp Asn Asn
                  245                   250
```

<210> 3901

<211> 143

<212> PRT

<213> Homo sapiens


<400> 3901

Met Pro Gly Ala Leu Gln Met Leu Ser Asn Ser Pro Arg Arg Asp Ser
1               5                   10                  15

Leu Leu Ala Arg Gly Leu Val Ser Ala Cys Val Leu Met Pro Ser Ser
                20                  25                  30

Leu Leu Ser Thr Ala Pro Gln Val Leu Ser Thr Ser Ser Pro Ala Gln
                35                  40                  45

Gln Ala Glu Asn Glu Ala Lys Ala Ser Ser Ser Ile Leu Ile Asn Glu
            50                  55                  60

Ser Glu Pro Thr Thr Asn Ile Gln Ile Arg Leu Ala Asp Gly Gly Arg
65                  70                  75                  80

Leu Val Gln Lys Phe Asn His Ser His Arg Ile Ser Asp Ile Arg Leu
                85                  90                  95

Phe Ile Val Asp Ala Arg Pro Ala Met Ala Ala Thr Ser Phe Ile Leu
                100                 105                 110

Met Thr Thr Phe Pro Asn Lys Glu Leu Ala Asp Glu Ser Gln Thr Leu
            115                 120                 125

Lys Glu Ala Asn Leu Leu Asn Ala Val Ile Val Gln Arg Leu Thr
            130                 135                 140


<210> 3902

<211> 181

<212> PRT

<213> Homo sapiens


<400> 3902

Met Ala Phe Pro Glu Val Ala Gly Asn Leu Asn Leu Leu Lys Leu Ser
1               5                   10                  15

Gln Asn Leu Asn Val Asn Ser Pro Ser Ser Leu Ala Cys Arg Leu Ile
                20                  25                  30

Gln Gly Leu Arg Ala Cys Tyr Pro Val Thr Thr Ser Ser Arg Glu Glu
            35                  40                  45

Leu Leu Arg Arg Lys Gln Lys Glu Ile Gln Phe Pro Pro Arg Ile Ser
        50                  55                  60

Ser Leu Arg Phe His Gln Glu Met Thr Lys Gly Gly Trp Ala Arg Cys
65                  70                  75                  80

Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Ala Glu Val Gly Arg Ser
                85                  90                  95

Arg Gly Gln Glu Ile Lys Thr Ile Leu Ala Asn Met Val Lys Pro His
                100                 105                 110

Phe Tyr Lys Met Gln Lys Leu Ala Gly His Gly Gly Ala Arg Leu Trp
            115                 120                 125

Ser Arg Leu Leu Gly Arg Leu Arg Arg Glu Asn Cys Leu Ser Pro Gly
        130                 135                 140

Gly Gly Gly Gly Ser Glu Pro Gly Leu His His Cys Ile Pro Ala Trp
145                 150                 155                 160

Pro Gln Ser Lys Thr Pro Lys Asn Ile Tyr Ile Tyr Asp Lys Arg Val
                165                 170                 175

Arg Lys Leu Phe Leu
            180

<210> 3903

<211> 160

<212> PRT

<213> Homo sapiens

<400> 3903

Met Cys Gly Met Leu Pro Phe Ser Ala Phe Gln Cys Asn Gly Pro Cys
1               5                   10                  15

Ile Gly Pro His Leu Ala Val Gln His Arg Gln Val Phe Cys Gln Thr
                20                  25                  30

Arg Asp Gly Ile Thr Leu Pro Ser Glu Gln Cys Ser Ala Leu Pro Arg
            35                  40                  45

Pro Val Ser Thr Gln Asn Cys Trp Ser Glu Ala Cys Ser Val His Trp
        50                  55                  60

Arg Val Ser Leu Trp Thr Leu Cys Thr Ala Thr Cys Gly Asn Tyr Gly
65                  70                  75                  80

Phe Gln Ser Arg Arg Val Glu Cys Val His Ala Arg Thr Asn Lys Ala
                85                  90                  95

Val Pro Glu His Leu Cys Ser Trp Gly Pro Arg Pro Ala Asn Trp Gln
                100                 105                 110

Arg Cys Asn Ile Thr Pro Cys Glu Asn Ser Met Phe Gln Pro Gln Arg
            115                 120                 125

Thr Phe Cys Lys Phe Pro Ile Glu His Arg Val Gln Arg Ala Val Pro
        130                 135                 140

Gly Thr Asp Pro Glu His Arg Ala Trp Gly Gln Leu Pro Gln Gly Leu
145                 150                 155                 160

<210> 3904

<211> 373

<212> PRT

<213> Homo sapiens


<400> 3904

Met Phe Phe Tyr Val Thr Gln Gly Gln Glu Glu Ile Ala Ser Ser Gly
1               5                   10                  15

Thr Ser Tyr Leu Asn Arg Thr Glu Ala Ala Asn Val Glu Lys Ile Thr
                20                  25                  30

Thr Lys Leu Leu Lys Ala Gly Ala Lys Pro Asp Gln Ile Gly Ile Ile
                35                  40                  45

Thr Pro Tyr Glu Gly Gln Arg Ser Tyr Leu Val Gln Tyr Met Gln Phe
            50                  55                  60

Ser Gly Ser Leu His Thr Lys Leu Tyr Gln Glu Val Glu Ile Ala Ser
65                  70                  75                  80

Val Asp Ala Phe Gln Gly Arg Glu Lys Asp Phe Ile Ile Leu Ser Cys
                85                  90                  95

Val Arg Ala Asn Glu His Gln Gly Ile Gly Phe Leu Asn Asp Pro Arg
                100                 105                 110

Arg Leu Asn Val Ala Leu Thr Arg Ala Arg Tyr Gly Val Ile Ile Val
                115                 120                 125

Gly Asn Pro Lys Ala Leu Ser Lys Gln Pro Leu Trp Asn His Leu Leu
            130                 135                 140

Asn Tyr Tyr Lys Glu Gln Lys Val Leu Val Glu Gly Pro Leu Asn Asn
145                 150                 155                 160

Leu Arg Glu Ser Leu Met Gln Phe Ser Lys Pro Arg Lys Leu Val Asn
                165                 170                 175

Thr Ile Asn Pro Gly Ala Arg Phe Met Thr Thr Ala Met Tyr Asp Ala
            180                 185                 190

Arg Glu Ala Ile Ile Pro Gly Ser Val Tyr Asp Arg Ser Ser Gln Gly
            195                 200                 205

Arg Pro Ser Ser Met Tyr Phe Gln Thr His Asp Gln Ile Gly Met Ile
            210                 215                 220

Ser Ala Gly Pro Ser His Val Ala Ala Met Asn Ile Pro Ile Pro Phe
225                 230                 235                 240

Asn Leu Val Met Pro Pro Met Pro Pro Pro Gly Tyr Phe Gly Gln Ala
                    245                 250                 255

Asn Gly Pro Ala Ala Gly Arg Gly Thr Pro Lys Gly Lys Thr Gly Arg
            260                 265                 270

Gly Gly Arg Gln Lys Asn Arg Phe Gly Leu Pro Gly Pro Ser Gln Thr
            275                 280                 285

Asn Leu Pro Asn Ser Gln Ala Ser Gln Asp Val Ala Ser Gln Pro Phe
            290                 295                 300

Ser Gln Gly Ala Leu Thr Gln Gly Tyr Ile Ser Met Ser Gln Pro Ser
305                 310                 315                 320

Gln Met Ser Gln Pro Gly Leu Ser Gln Pro Glu Leu Ser Gln Asp Ser
                    325                 330                 335

Tyr Leu Gly Asp Glu Phe Lys Ser Gln Ile Asp Val Ala Leu Ser Gln
            340                 345                 350

Asp Ser Thr Tyr Gln Gly Glu Arg Ala Tyr Gln His Gly Gly Val Thr
            355                 360                 365

Gly Leu Ser Gln Tyr
370


<210> 3905

<211> 441

<212> PRT

<213> Homo sapiens


<400> 3905

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
Met Gly Ser Gln Ala Arg Pro His Ser Thr Leu Gln Gly Phe Gly Tyr
1        5         10       15

Ser Lys Glu His Gly His Thr Gly Ser Ala Gly Glu Ala Phe Leu Ser
      20       25       30

Thr Ile Gln Lys Ala Ala Glu Val Val Ala Ser Ala Met Arg Pro Gly
      35       40       45

Pro Glu Ser Pro Ser Thr Arg Arg Leu Leu Pro Arg Gly Asp Thr Tyr
      50       55       60

Gln Pro Ala Met Met Pro Ser Ala Ser His Gly Pro Pro Thr Leu Gly
65        70       75       80

Asn Leu Leu Pro Gly Ala Ile Pro Gly Pro Arg Ala Val Arg His Gln
        85      90       95

Pro Gly Gln Ala Gly Gly Gly Trp Asp Glu Leu Asp Ser Gly Pro Ser
       100     105      110

Ser Gln Asn Ser Ser Gln Asn Ser Asp Leu Ser Arg Val Ser Asp Ser
       115     120      125

Gly Ser His Ser Gly Ser Asp Ser His Ser Gly Ala Ser Arg Glu Pro
    130     135      140

Gly Asp Leu Ala Glu Arg Val Glu Val Val Ala Leu Ser Asp Cys Gln
145      150     155      160

Gln Glu Leu Ser Leu Val Arg Thr Val Thr Arg Gly Pro Arg Ala Phe
       165     170      175

Leu Ser Arg Glu Glu Ala Gln His Phe Ile Lys Ala Cys Gly Leu Leu
       180     185      190

Asn Cys Glu Ala Val Leu Gln Leu Leu Thr Cys His Leu Arg Gly Thr
　　　　　　195　　　　　　　　　200　　　　　　　　　205

Ser Glu Cys Thr Gln Leu Arg Ala Leu Cys Ala Ile Ala Ser Leu Gly
　　　　210　　　　　　　　　215　　　　　　　　　220

Ser Ser Asp Leu Leu Pro Gln Glu His Ile Leu Leu Arg Thr Arg Pro
225　　　　　　　　　230　　　　　　　　　235　　　　　　　　　240

Trp Leu Gln Glu Leu Ser Met Gly Ser Pro Gly Pro Val Thr Asn Lys
　　　　　　245　　　　　　　　　250　　　　　　　　　255

Ala Thr Lys Ile Leu Arg His Phe Glu Ala Ser Cys Gly Gln Leu Ser
　　　　　　260　　　　　　　　　265　　　　　　　　　270

Pro Ala Arg Gly Thr Ser Ala Glu Pro Gly Pro Thr Ala Ala Leu Pro
　　　　275　　　　　　　　　280　　　　　　　　　285

Gly Pro Ser Asp Leu Leu Thr Asp Ala Val Pro Leu Pro Gly Ser Gln
　　　　290　　　　　　　　　295　　　　　　　　　300

Val Phe Leu Gln Pro Leu Ser Ser Thr Pro Val Ser Ser Arg Ser Pro
305　　　　　　　　　310　　　　　　　　　315　　　　　　　　　320

Ala Pro Ser Ser Gly Met Pro Ser Ser Pro Val Pro Thr Pro Pro Pro
　　　　　　325　　　　　　　　　330　　　　　　　　　335

Asp Ala Ser Pro Ile Pro Ala Pro Gly Asp Pro Ser Glu Ala Glu Ala
　　　　　　340　　　　　　　　　345　　　　　　　　　350

Arg Leu Ala Glu Ser Arg Arg Trp Arg Pro Glu Arg Ile Pro Gly Gly
　　　　355　　　　　　　　　360　　　　　　　　　365

Thr Asp Ser Pro Lys Arg Gly Pro Ser Ser Cys Ala Trp Ser Arg Asp
　　　　370　　　　　　　　　375　　　　　　　　　380

Ser Leu Phe Ala Gly Met Glu Leu Val Ala Cys Pro Arg Leu Val Gly
385　　　　　　　　　390　　　　　　　　　395　　　　　　　　　400

Ala Gly Ala Ala Ala Gly Glu Ser Cys Pro Asp Ala Pro Arg Ala Pro
　　　　　　405　　　　　　　　　410　　　　　　　　　415

Gln Thr Ser Ser Gln Arg Thr Ala Ala Lys Glu Pro Pro Gly Ser Glu

```
                420                425                430
Pro Ser Ala Phe Ala Phe Leu Asn Ala
             435                440
```

<210> 3906

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3906

```
Met Pro Pro Arg Arg Ser Ile Val Glu Val Lys Val Leu Asp Val Gln
 1               5                10               15
Lys Arg Arg Val Pro Asn Lys His Tyr Val Tyr Ile Ile Arg Val Thr
                20                25               30
Trp Ser Ser Gly Ser Thr Glu Ala Ile Tyr Arg Arg Tyr Ser Lys Phe
             35                40               45
Phe Asp Leu Gln Met Gln Met Leu Asp Lys Phe Pro Met Glu Gly Gly
          50                55               60
Gln Lys Asp Pro Lys Gln Arg Ile Ile Pro Phe Leu Pro Gly Lys Ile
 65               70               75               80
Leu Phe Arg Arg Ser His Ile Arg Asp Val Ala Val Lys Arg Leu Ile
                85               90               95
Pro Ile Asp Glu Tyr Cys Lys Ala Leu Ile Gln Leu Pro Pro Tyr Ile
               100              105              110
Ser Gln Cys Asp Glu Val Leu Gln Phe Phe Glu Thr Arg Pro Glu Asp
             115              120              125
Leu Asn Pro Pro Lys Glu
    130
```

<210> 3907

<211> 413

<212> PRT

<213> Homo sapiens

<400> 3907

Met Gly His Asn Met Gly Ile Asn His Asp Asn Asp His Pro Ser Cys
1               5                   10                  15

Ala Asp Gly Leu His Ile Met Ser Gly Glu Trp Ile Lys Gly Gln Asn
            20                  25                  30

Leu Gly Asp Val Ser Trp Ser Arg Cys Ser Lys Glu Asp Leu Glu Arg
            35                  40                  45

Phe Leu Arg Ser Lys Ala Ser Asn Cys Leu Leu Gln Thr Asn Pro Gln
        50                  55                  60

Ser Val Asn Ser Val Met Val Pro Ser Lys Leu Pro Gly Met Thr Tyr
65                  70                  75                  80

Thr Ala Asp Glu Gln Cys Gln Ile Leu Phe Gly Pro Leu Ala Ser Phe
                85                  90                  95

Cys Gln Glu Met Gln His Val Ile Cys Thr Gly Leu Trp Cys Lys Val
                100                 105                 110

Glu Gly Glu Lys Glu Cys Arg Thr Lys Leu Asp Pro Pro Met Asp Gly
            115                 120                 125

Thr Asp Cys Asp Leu Gly Lys Trp Cys Lys Ala Gly Glu Cys Thr Ser
            130                 135                 140

Arg Thr Ser Ala Pro Glu His Leu Ala Gly Glu Trp Ser Leu Trp Ser
145                 150                 155                 160

Pro Cys Ser Arg Thr Cys Ser Ala Gly Ile Ser Ser Arg Glu Arg Lys

```
                165                   170                   175
Cys Pro Gly Leu Asp Ser Glu Ala Arg Asp Cys Asn Gly Pro Arg Lys
              180                   185                   190
Gln Tyr Arg Ile Cys Glu Asn Pro Pro Cys Pro Ala Gly Leu Pro Gly
              195                   200                   205
Phe Arg Asp Trp Gln Cys Gln Ala Tyr Ser Val Arg Thr Ser Ser Pro
          210                   215                   220
Lys His Ile Leu Gln Trp Gln Ala Val Leu Asp Glu Glu Lys Pro Cys
225                   230                   235                   240
Ala Leu Phe Cys Ser Pro Val Gly Lys Glu Gln Pro Ile Leu Leu Ser
                  245                   250                   255
Glu Lys Val Met Asp Gly Thr Ser Cys Gly Tyr Gln Gly Leu Asp Ile
                  260                   265                   270
Cys Ala Asn Gly Arg Cys Gln Lys Val Gly Cys Asp Gly Leu Leu Gly
          275                   280                   285
Ser Leu Ala Arg Glu Asp His Cys Gly Val Cys Asn Gly Asn Gly Lys
      290                   295                   300
Ser Cys Lys Ile Ile Lys Gly Asp Phe Asn His Thr Arg Gly Ala Gly
305                   310                   315                   320
Tyr Val Glu Val Leu Val Ile Pro Ala Gly Ala Arg Arg Ile Lys Val
                  325                   330                   335
Val Glu Glu Lys Pro Ala His Ser Tyr Leu Ala Leu Arg Asp Ala Gly
              340                   345                   350
Lys Gln Ser Ile Asn Ser Asp Trp Lys Ile Glu His Ser Gly Ala Phe
          355                   360                   365
Asn Leu Ala Gly Thr Thr Val His Tyr Val Arg Arg Gly Leu Trp Glu
      370                   375                   380
Lys Ile Ser Ala Lys Gly Pro Thr Thr Ala Pro Leu His Leu Leu Val
385                   390                   395                   400
```

Leu Leu Phe Gln Asp Gln Asn Tyr Gly Leu His Tyr Glu
              405                 410


<210> 3908

<211> 1058

<212> PRT

<213> Homo sapiens


<400> 3908

Met Glu Arg Ser Pro Gly Glu Gly Pro Ser Pro Ser Pro Met Asp Gln
 1               5               10              15

Pro Ser Ala Pro Ser Asp Pro Thr Asp Gln Pro Pro Ala Ala His Ala
              20              25              30

Lys Pro Asp Pro Gly Ser Gly Gly Gln Pro Ala Gly Pro Gly Ala Ala
              35              40              45

Gly Glu Ala Leu Ala Val Leu Thr Ser Phe Gly Arg Arg Leu Leu Val
      50              55              60

Leu Ile Pro Val Tyr Leu Ala Gly Ala Val Gly Leu Ser Val Gly Phe
65              70              75              80

Val Leu Phe Gly Leu Ala Leu Tyr Leu Gly Trp Arg Arg Val Arg Asp
              85              90              95

Glu Lys Glu Arg Ser Leu Arg Ala Ala Arg Gln Leu Leu Asp Asp Glu
              100             105             110

Lys Leu Leu Ala Glu Thr Val Ala Pro Ala Val Arg Gly Ser Asn Pro
              115             120             125

His Leu Gln Thr Phe Thr Phe Thr Arg Val Glu Leu Gly Glu Lys Pro
      130             135             140

Leu Arg Ile Ile Gly Val Lys Val His Pro Gly Gln Arg Lys Glu Gln

●

```
       145              150              155              160
Ile Leu Leu Asp Leu Asn Ile Ser Tyr Val Gly Asp Val Gln Ile Asp
                    165              170              175
Val Glu Val Lys Lys Tyr Phe Cys Lys Ala Gly Val Lys Gly Met Gln
                    180              185              190
Leu His Gly Val Leu Arg Val Ile Leu Glu Pro Leu Ile Gly Asp Leu
                    195              200              205
Pro Phe Val Gly Ala Val Ser Met Phe Phe Ile Arg Arg Pro Thr Leu
       210              215              220
Asp Ile Asn Trp Thr Gly Met Thr Asn Leu Leu Asp Ile Pro Gly Leu
225              230              235              240
Ser Ser Leu Ser Asp Thr Met Ile Met Asp Ser Ile Ala Ala Phe Leu
                    245              250              255
Val Leu Pro Asn Arg Leu Leu Val Pro Leu Val Pro Asp Leu Gln Asp
                    260              265              270
Val Ala Gln Leu Arg Ser Pro Leu Pro Arg Gly Ile Ile Arg Ile His
                    275              280              285
Leu Leu Ala Ala Arg Gly Leu Ser Ser Lys Asp Lys Tyr Val Lys Gly
       290              295              300
Leu Ile Glu Gly Lys Ser Asp Pro Tyr Ala Leu Val Arg Leu Gly Thr
305              310              315              320
Gln Thr Phe Cys Ser Arg Val Ile Asp Glu Glu Leu Asn Pro Gln Trp
                    325              330              335
Gly Glu Thr Tyr Glu Val Met Val His Glu Val Pro Gly Gln Glu Ile
                    340              345              350
Glu Val Glu Val Phe Asp Lys Asp Pro Asp Lys Asp Asp Phe Leu Gly
                    355              360              365
Arg Met Lys Leu Asp Val Gly Lys Val Leu Gln Ala Ser Val Leu Asp
       370              375              380
```

Asp Trp Phe Pro Leu Gln Gly Gly Gln Gly Gln Val His Leu Arg Leu
385             390             395             400

Glu Trp Leu Ser Leu Leu Ser Asp Ala Glu Lys Leu Glu Gln Val Leu
            405             410             415

Gln Trp Asn Trp Gly Val Ser Ser Arg Pro Asp Pro Pro Ser Ala Ala
            420             425             430

Ile Leu Val Val Tyr Leu Asp Arg Ala Gln Asp Leu Pro Leu Lys Lys
            435             440             445

Gly Asn Lys Glu Pro Asn Pro Met Val Gln Leu Ser Ile Gln Asp Val
            450             455             460

Thr Gln Glu Ser Lys Ala Val Tyr Ser Thr Asn Cys Pro Val Trp Glu
465             470             475             480

Glu Ala Phe Arg Phe Phe Leu Gln Asp Pro Gln Ser Gln Glu Leu Asp
            485             490             495

Val Gln Val Lys Asp Asp Ser Arg Ala Leu Thr Leu Gly Ala Leu Thr
            500             505             510

Leu Pro Leu Ala Arg Leu Leu Thr Ala Pro Glu Leu Ile Leu Asp Gln
            515             520             525

Trp Phe Gln Leu Ser Ser Ser Gly Pro Asn Ser Arg Leu Tyr Met Lys
            530             535             540

Leu Val Met Arg Ile Leu Tyr Leu Asp Ser Ser Glu Ile Cys Phe Pro
545             550             555             560

Thr Val Pro Gly Cys Pro Gly Ala Trp Asp Val Asp Ser Glu Asn Pro
            565             570             575

Gln Arg Gly Ser Ser Val Asp Ala Pro Pro Arg Pro Cys His Thr Thr
            580             585             590

Pro Asp Ser Gln Phe Gly Thr Glu His Val Leu Arg Ile His Val Leu
            595             600             605

Glu Ala Gln Asp Leu Ile Ala Lys Asp Arg Phe Leu Gly Gly Leu Val

```
          610                    615                    620
Lys Gly Lys Ser Asp Pro Tyr Val Lys Leu Lys Leu Ala Gly Arg Ser
625                    630                    635                    640
Phe Arg Ser His Val Val Arg Glu Asp Leu Asn Pro Arg Trp Asn Glu
                       645                    650                    655
Val Phe Glu Val Ile Val Thr Ser Val Pro Gly Gln Glu Leu Glu Val
                       660                    665                    670
Glu Val Phe Asp Lys Asp Leu Asp Lys Asp Asp Phe Leu Gly Arg Cys
                       675                    680                    685
Lys Val Arg Leu Thr Thr Val Leu Asn Ser Gly Phe Leu Asp Glu Trp
          690                    695                    700
Leu Thr Leu Glu Asp Val Pro Ser Gly Arg Leu His Leu Arg Leu Glu
705                    710                    715                    720
Arg Leu Thr Pro Arg Pro Thr Ala Ala Glu Leu Glu Glu Val Leu Gln
                       725                    730                    735
Val Asn Ser Leu Ile Gln Thr Gln Lys Ser Ala Glu Leu Ala Ala Ala
                       740                    745                    750
Leu Leu Ser Ile Tyr Met Glu Arg Ala Glu Asp Leu Pro Leu Arg Lys
                       755                    760                    765
Gly Thr Lys His Leu Ser Pro Tyr Ala Thr Leu Thr Val Gly Asp Ser
          770                    775                    780
Ser His Lys Thr Lys Thr Ile Ser Gln Thr Ser Ala Pro Val Trp Asp
785                    790                    795                    800
Glu Ser Ala Ser Phe Leu Ile Arg Lys Pro His Thr Glu Ser Leu Glu
                       805                    810                    815
Leu Gln Val Arg Gly Glu Gly Thr Gly Val Leu Gly Ser Leu Ser Leu
                       820                    825                    830
Pro Leu Ser Glu Leu Leu Val Ala Asp Gln Leu Cys Leu Asp Arg Trp
          835                    840                    845
```

Phe Thr Leu Ser Ser Gly Gln Gly Gln Val Leu Leu Arg Ala Gln Leu
　　850　　　　　　　855　　　　　　　860

Gly Ile Leu Val Ser Gln His Ser Gly Val Glu Ala His Ser His Ser
865　　　　　　　870　　　　　　　875　　　　　　　880

Tyr Ser His Ser Ser Ser Ser Leu Ser Glu Glu Pro Glu Leu Ser Gly
　　　　　　885　　　　　　　890　　　　　　　895

Gly Pro Pro His Ile Thr Ser Ser Ala Pro Glu Leu Arg Gln Arg Leu
　　900　　　　　　　905　　　　　　　910

Thr His Val Asp Ser Pro Leu Glu Ala Pro Ala Gly Pro Leu Gly Gln
　　915　　　　　　　920　　　　　　　925

Val Lys Leu Thr Leu Trp Tyr Tyr Ser Glu Glu Arg Lys Leu Val Ser
　　930　　　　　　　935　　　　　　　940

Ile Val His Gly Cys Arg Ser Leu Arg Gln Asn Gly Arg Asp Pro Pro
945　　　　　　　950　　　　　　　955　　　　　　　960

Asp Pro Tyr Val Ser Leu Leu Leu Leu Pro Asp Lys Asn Arg Gly Thr
　　　　　　965　　　　　　　970　　　　　　　975

Lys Arg Arg Thr Ser Gln Lys Lys Arg Thr Leu Ser Pro Glu Phe Asn
　　　　　　980　　　　　　　985　　　　　　　990

Glu Arg Phe Glu Trp Glu Leu Pro Leu Asp Glu Ala Gln Arg Arg Lys
　　　　　995　　　　　　　1000　　　　　　　1005

Leu Asp Val Ser Val Lys Ser Asn Ser Ser Phe Met Ser Arg Glu Arg
　　1010　　　　　　　1015　　　　　　　1020

Glu Leu Leu Gly Lys Val Gln Leu Asp Leu Ala Glu Thr Asp Leu Ser
1025　　　　　　　1030　　　　　　　1035　　　　　　　1040

Gln Gly Val Ala Arg Trp Tyr Asp Leu Met Asp Asn Lys Asp Lys Gly
　　　　　1045　　　　　　　1050　　　　　　　1055

Ser Ser

<210> 3909

<211> 482

<212> PRT

<213> Homo sapiens

<400> 3909

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Met Lys Phe Lys Leu His Val Asn Ser Ala Arg Gln Tyr Lys Asp Leu
 1               5                  10                  15

Trp Asn Met Ser Asp Asp Lys Pro Phe Leu Cys Thr Ala Pro Gly Cys
                20                  25                  30

Gly Gln Arg Phe Thr Asn Glu Asp His Leu Ala Asp Gln Thr Pro Thr
                35                  40                  45

Pro Thr Arg Phe Leu Lys Asn Cys Glu Glu Val Gly Leu Phe Asn Glu
        50                  55                  60

Leu Ala Ser Pro Phe Glu Asn Glu Phe Lys Lys Ala Ser Glu Asp Asp
65                  70                  75                  80

Ile Lys Lys Met Pro Leu Asp Leu Ser Pro Leu Ala Thr Pro Ile Ile
                85                  90                  95

Arg Ser Lys Ile Glu Glu Pro Ser Val Val Glu Thr Thr His Gln Asp
                100                 105                 110

Ser Pro Leu Pro His Pro Glu Ser Thr Thr Ser Asp Glu Lys Glu Val
        115                 120                 125

Pro Leu Ala Gln Thr Ala Gln Pro Thr Ser Ala Ile Val Arg Pro Ala
        130                 135                 140

Ser Leu Gln Val Pro Asn Val Leu Leu Thr Ser Ser Asp Ser Ser Val
145                 150                 155                 160

Ile Ile Gln Gln Ala Val Pro Ser Pro Thr Ser Ser Thr Val Ile Thr
                165                 170                 175
```

Gln Ala Pro Ser Ser Asn Arg Pro Ile Val Pro Val Pro Gly Pro Phe
        180            185            190

Pro Leu Leu Leu His Leu Pro Asn Gly Gln Thr Met Pro Val Ala Ile
        195            200            205

Pro Ala Ser Ile Thr Ser Ser Asn Val His Val Pro Ala Ala Val Pro
        210            215            220

Leu Val Arg Pro Val Thr Met Val Pro Ser Val Pro Gly Ile Pro Gly
225            230            235            240

Pro Ser Ser Pro Gln Pro Val Gln Ser Glu Ala Lys Met Arg Leu Lys
            245            250            255

Ala Ala Leu Thr Gln Gln His Pro Pro Val Thr Asn Gly Asp Thr Val
        260            265            270

Lys Gly His Gly Ser Gly Leu Val Arg Thr Gln Ser Glu Glu Ser Arg
        275            280            285

Pro Gln Ser Leu Gln Gln Pro Ala Thr Ser Thr Thr Glu Thr Pro Ala
        290            295            300

Ser Pro Ala His Thr Thr Pro Gln Thr Gln Ser Thr Ser Gly Arg Arg
305            310            315            320

Arg Arg Ala Ala Asn Glu Asp Pro Asp Glu Lys Arg Arg Lys Phe Leu
            325            330            335

Glu Arg Asn Arg Ala Ala Ala Ser Arg Cys Arg Gln Lys Arg Lys Val
        340            345            350

Trp Val Gln Ser Leu Glu Lys Lys Ala Glu Asp Leu Ser Ser Leu Asn
        355            360            365

Gly Gln Leu Gln Ser Glu Val Thr Leu Leu Arg Asn Glu Val Ala Gln
        370            375            380

Leu Lys Gln Leu Leu Leu Ala His Lys Asp Cys Pro Val Thr Ala Met
385            390            395            400

Gln Lys Lys Ser Gly Tyr His Thr Ala Asp Lys Asp Asp Ser Ser Glu

```
               405              410              415
Asp Ile Ser Val Pro Ser Ser Pro His Thr Glu Ala Ile Gln His Ser
          420              425              430
Ser Val Ser Thr Ser Asn Gly Val Ser Ser Thr Ser Lys Ala Glu Ala
          435              440              445
Val Ala Thr Ser Val Leu Thr Gln Met Ala Asp Gln Ser Thr Glu Pro
      450              455              460
Ala Leu Ser Gln Ile Val Met Ala Pro Ser Ser Gln Ser Gln Pro Ser
465              470              475              480
Gly Ser
```

<210> 3910

<211> 100

<212> PRT

<213> Homo sapiens


<400> 3910

```
Met Phe Tyr Ile Tyr Asn Ile Tyr Val Cys Phe Ile Tyr Ile Thr Tyr
1               5               10              15
Met Tyr Val Leu Tyr Ile Tyr Met Tyr Ile Lys Lys Ile Thr Asn Leu
          20              25              30
Val Thr Leu Leu Met Gln Met Ile Trp Gly Cys Leu Pro Ser Phe Thr
          35              40              45
Ile Arg Gly Gly Thr Ser Ala Ala Pro Ser Val Ser Val Ser Gly Gln
      50              55              60
His Leu Val Ser Leu Glu Ala Ala Ser Met His Asp Ile Ser Lys Gln
65              70              75              80
```

Gly Pro Asp Phe Leu Pro Glu Gly His Phe Ser Arg Phe Ser Asn Trp
　　　　　　　　85　　　　　　　　　90　　　　　　　　　95

Phe Leu Tyr Val
　　　　　　100


<210> 3911

<211> 284

<212> PRT

<213> Homo sapiens


<400> 3911

Met Glu Thr Met Arg Ala Gln Arg Leu Gln Pro Gly Val Gly Thr Ser
1　　　　　　　　5　　　　　　　　　10　　　　　　　　　15

Gly Arg Gly Thr Leu Arg Ala Leu Arg Pro Gly Val Thr Gly Ala Ala
　　　　　　20　　　　　　　　　25　　　　　　　　　30

Ala Ala Thr Ala Lys His Thr Gln Gly Tyr Gly Arg Val Asn Val Val
　　　　　35　　　　　　　　　40　　　　　　　　　45

Glu Ala Leu Gln Glu Phe Trp Gln Met Lys Gln Ser Arg Gly Ala Asp
　　50　　　　　　　　　55　　　　　　　　　60

Leu Lys Asn Gly Ala Leu Val Val Tyr Glu Met Val Pro Ser Asn Ser
65　　　　　　　　　70　　　　　　　　　75　　　　　　　　　80

Pro Pro Tyr Val Cys Tyr Val Thr Leu Pro Gly Gly Ser Cys Phe Gly
　　　　　　85　　　　　　　　　90　　　　　　　　　95

Ser Phe Gln Phe Cys Pro Thr Lys Ala Glu Ala Arg Arg Ser Ala Ala
　　　　　　100　　　　　　　　105　　　　　　　　110

Lys Ile Ala Leu Met Asn Ser Val Phe Asn Glu His Pro Ser Arg Arg
　　　　　115　　　　　　　　120　　　　　　　　125

Ile Thr Asp Glu Phe Ile Glu Lys Ser Val Ser Glu Ala Leu Ala Ser

```
          130                    135                    140
Phe Asn Gly Asn Arg Glu Glu Ala Asp Asn Pro Asn Thr Gly Ile Gly
          145                    150                    155                    160
Ala Phe Arg Phe Met Leu Glu Ser Asn Lys Gly Lys Ser Met Leu Glu
                         165                    170                    175
Phe Gln Glu Leu Met Thr Val Phe Gln Leu Leu His Trp Asn Gly Ser
                         180                    185                    190
Leu Lys Ala Met Arg Glu Arg Gln Cys Ser Arg Gln Glu Val Leu Ala
                         195                    200                    205
His Tyr Ser His Arg Ala Leu Asp Asp Asp Ile Arg His Gln Met Ala
          210                    215                    220
Leu Asp Trp Val Ser Arg Glu Gln Ser Val Pro Gly Ala Leu Ser Arg
225                    230                    235                    240
Glu Leu Ala Ser Thr Glu Arg Glu Leu Asp Glu Ala Arg Leu Ala Gly
                         245                    250                    255
Lys Glu Leu Arg Phe His Lys Glu Lys Lys Asp Ile Leu Val Leu Ala
                         260                    265                    270
Ala Gly Gln Leu Gly Asn Met His Ser Ser Asn Cys
          275                    280
```

<210> 3912

<211> 108

<212> PRT

<213> Homo sapiens


<400> 3912

```
Met Thr Gly Met Phe Phe Ser Val Asp Thr Glu Pro Asp Leu Thr Phe
1                   5                      10                     15
```

Phe Asp Asn His Pro Arg Ala Asp Phe Phe Leu Phe Phe Leu Cys Leu
                20              25              30
Thr Lys Val Ser Pro Gly Glu Glu Ser Cys Val Pro Trp Arg Phe Gln
        35              40              45
Val Pro Ala Glu Pro Ser Gly Tyr Trp Leu Cys Phe Ser Thr Cys Asn
    50              55              60
Leu Ala Phe Cys Gly Leu Gly Ile Gly Cys Val Ile Ser Ile Glu Met
65              70              75              80
Gly Cys Cys Ser Leu Lys Ser Gly Arg Gly Met Ser Leu Gly Ser Asn
                85              90              95
Ser Phe Pro Leu Gly Phe Cys Thr Gln Leu Arg Val
            100             105


<210> 3913

<211> 30

<212> RNA

<213> Artificial Sequence


<220>

<223> Description of Artificial Sequence: an artificially
synthesized oligo-cap linker sequence


<400> 3913

agcaucgagu cggccuuguu ggccuacugg                                30



<210> 3914

<211> 42

<212> DNA

<213> Artificial Sequence


<220>

<223> Description of Artificial Sequence: an artificially

synthesized oligo(dT) primer sequence


<400> 3914

gcggctgaag acggcctatg tggccttttt tttttttttt tt                42




<210> 3915

<211> 21

<212> DNA

<213> Artificial Sequence


<220>

<223> Description of Artificial Sequence: an artificially

synthesized primer sequence


<400> 3915

agcatcgagt cggccttgtt g                21




<210> 3916

<211> 21

<212> DNA

<213> Artificial Sequence

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<220>

<223> Description of Artificial Sequence: an artificially
synthesized primer sequence


<400> 3916

gcggctgaag acggcctatg t                                        21

SEQUENCE LISTING


<110> Research Association for Biotechnology

●

<120> Full length cDNA


<130> BTR-A0301


<160> 3916


<170> PatentIn Ver. 3.1


<210> 1

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<211> 1437

<212> DNA

<213> Homo sapiens


<400> 1

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agaccgacgg gcagaacgac gggcggcgac tgcggcgacc gcgggacggc gagaggcacg   180

cggcgggagg ggaccggaat ccgcagctcc ggccgcgcca tggacggcaa cgacaacgtg   240

accctgctct tcgcccctct gctgcgggac aactacaccc tggcgcccaa tgccagcagc   300

ctgggccccg gcacggacct cgccctcgcc cctgcctcca gcgccggccc cggccctggg　360

ctcagcctcg ggccgggtcc gagcttcggc ttcagccccg gccccactcc gaccccggag　420

cccacgacca gcggcctcgc gggcggcgcg gcgagccacg gcccttcccc gttccctcgg　480

ccctgggcgc cccacgcgct cccgttctgg gacacgccgc tgaaccacgg gctgaacgtg　540

ttcgtgggcg ccgccctgtg catcaccatg ctgggcctgg gctgcacggt ggacgtgaac　600

cacttcgggg cgcacgtccg tcggcccgtg ggcgcgctgc tggcagcgct ctgccagttc　660

ggcctcctgc cgctgctggc cttcctgctg gccctcgcct tcaagctgga cgaggtggcc　720

gccgtggcgg tgctcctgtg tggctgctgt cccggcggca atctctccaa tcttatgtcc　780

ctgctggttg acggcgacat gaacctcagc atcatcatga ccatctcctc cacgcttctg　840

gccctcgtct tgatgcccct gtgcctgtgg atctacagct gggcttggat caacacccct　900

atcgtgcagt tactacccct agggaccgtg accctgactc tctgcagcac tctcatacct　960

atcgggttgg gcgtcttcat tcgctacaaa tacagccggg tggctgacta cattgtgaag　1020

gtttccctgt ggtctctgct agtgactctg gtggtccttt tcataatgac cggcactatg　1080

ttaggacctg aactgctggc aagtatccct gcagctgttt atgtgatagc aatttttatg　1140

cctttggcag gctacgcttc aggttatggt ttagctactc tcttccatct tccacccaac　1200

tgcaagagga ctgtatgtct ggaaacaggt agtcagaatg tgcagctctg tacagccatt　1260

ctaaaactgg cctttccacc gcaattcata ggaagcatgt acatgtttcc tttgctgtat　1320

gcacttttcc agtctgcaga agcggggatt tttgttttaa tctataaaat gtatggaagt　1380

gaaatgttgc acaagcgaga tcctctagat gaagatgaag atacagatat ttcttat　1437


<210> 2

<211> 1582

<212> DNA

<213> Homo sapiens


<400> 2

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ggaggatcct cttttttggtg gcagcggcca caggtgtcca ctcccaggcc cagcttgtgc　120

agtctggggc tgaggcgaag aagcctgggg cctccgtgaa aatttcctgc aaggcttctg　　180

gatacccctt cagtggctat gttttacact ggctgcgaca ggcccccgga caaggacttg　　240

agtggctggg aagcatcacc gctggctacg atgccacaaa atattcacag aggttccagg　　300

acagaatcac cattaccagg gacacatccg cgagcacagt ttacttggaa tggagcagcc　　360

tgacatccga cgacacggct gtcctttact gtgcgaggga gggtgatgag gactacggtg　　420

actctcttgg cgcttttgat gtctggggcc aagggacact ggtcaccgtc tctccagcat　　480

ccccgaccag ccccaaggtc ttcccgctga gcctctgcag cacccagcca gatgggaacg　　540

tggtcatcgc ctgcctggtc cagggcttct cccccagga gccactcagt gtgacctgga　　600

gcgaaagcgg acagggcgtg accgccagaa acttcccacc cagccaggat gcctccgggg　　660

acctgtacac cacgagcagc cagctgaccc tgccggccac acagtgccta gccggcaagt　　720

ccgtgacatg ccacgtgaag cactacacga atcccagcca ggatgtgact gtgccctgcc　　780

cagttccctc aactccacct accccatctc cctcaactcc acctacccca tctccctcat　　840

gctgccaccc ccgactgtca ctgcaccgac cggccctcga ggacctgctc ttaggttcag　　900

aagcgaacct cacgtgcaca ctgaccggcc tgagagatgc ctcaggtgtc accttcacct　　960

ggacgccctc aagtgggaag agcgctgttc aaggaccacc tgaccgtgac ctctgtggct　　1020

gctacagcgt gtccagtgtc ctgccgggct gtgccgagcc atggaaccat gggaagacct　　1080

tcacttgcac tgctgcctac cccgagtcca agacccctgct aaccgccacc ctctcaaaat　　1140

ccggaaacac attccggccc gaggtccacc tgctgccgcc gccgtcggag gagctggccc　　1200

tgaacgagct ggtgacgctg acgtgcctgg cacgtggctt cagccccaag gatgtgctgg　　1260

ttcgctggct gcaggggtca caggagctgc cccgcgagaa gtacctgact tgggcatccc　　1320

ggcaggagcc cagccagggc accaccacct tcgctgtgac cagcatactg cgcgtggcag　　1380

ccgaggactg gaagaagggg gacaccttct cctgcatggt gggccacgag gccctgccgc　　1440

tggccttcac acagaagacc atcgaccgct tggcgggtaa acccacccat gtcaatgtgt　　1500

ctgttgtcat ggcggaggtg gacggcacct gctactgagc cgcccgcctg tccccacccc　　1560

tgaataaact ccatgctccc cc　　1582

<210> 3

<211> 2034

<212> DNA

<213> Homo sapiens


<400> 3

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gagttggttg ggccctggga agctgggttc tggcagcctg gtccctgaat gggtccagcc     240

tgtacagctg gggtcccagg tgggggtggg acaggagcca tgagatctga gtcccaagaa     300

tgggggctgg gctgggtttc ggctcagtag ctccccactc cccaaagcgc ccagatgtct     360

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tagctgaggt ggcgcagagg gcagtgagga cccgctggag gtactgcagt ttgaagcagg     840

gttgctgagg aaggtctcac tgaggaagtc acatttgggc agagctgaag ggctgtatgc     900

ctgtgtggag gaagggcgag tgtaaaggct ccggggcagg gacgtgtcag gtgcttgtag     960

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gctggggcgc gctgctcttc acgctctctg atggcgtgct ggcctgggac accttcgccc    1500
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agcccctgcc ccatgcccac ctggtgatca tgaccaccta ctatgctgcc cagctcctca    1560

tcacactgtc agccctcagg agcccggtgc ccaagactga ctgactaggg agcttgaagg    1620

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ccctcccagc caccagcctg cctccatgtt cactgtcggc cccacagcct gcccgccccc    1920

tgctgctgct ctgaatccgt tttccctgtg ggtgtggaac cgtagatgtt gctgttaccg    1980

taggagaggc ctcggggagg gtcatgattg tgataaacca tcgcggttaa tgac          2034


<210> 4

<211> 2312

<212> DNA

<213> Homo sapiens


<400> 4

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caaggaaatt ccaaaagaat caaaagaccc agaagtctta gtttgggaag aatgtgtggc     120

tgatactgca gtggtactac aaaacaataa atttggaact attatagact aggccccttg     180

aggccaatta tattatgact gtatgggcca gacccactca tgttcacagg ctccatctgt     240

ctggcccact aatccggcct atgttagtga tttaactaaa aggctagacc aggtttatag     300

aaggctagaa tcaccctatc catggaaatg gggtgaaaag aggatttcat caccccgacc     360

aaagttagtt agtcctgttg ttggtcctga acacccagaa ttatggaagc tcactgtggc     420

ctcataccac attagaattt ggtctggaaa tcaagttatg ggaacaagaa atcataagcc     480

atattatact attaacctaa attacaatct gaaaattcct ttgcaaagtt gtgtaaaacc     540

accttatatg ctagttgtag gaaacatagc tattaaacca gattcccaaa ctacaaccag     600

tgaaaattgt agattgttta cttgcattga ttcaactttt gattggcaga atggtactct     660

gtaagagcaa gagaaggcgt gtggatccct gtgtccatgg atcgaccgtg ggaggcttct     720

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ccatccgtac atatcttaag tattaaaagg agttctaact agatctaaaa gattcatttt   780

tactttgatt gcagtgatta tgggtcttat tgcagtcaca gctactgctg cacctgctgg   840

aattgcttta cactcctctg ttcaaactgc agaatatgtg aataattggc aaaagaattc   900

ctcaaaattg tggaattctt agactcaaat agatcaaaaa ttgacaaatc aaattaatga   960

tcttagacaa actgttattt ggatgagaga taggctcatg agcttagaat atctttttca  1020

gttacagtgt gactggaata catcagattt ttgtattaaa cctcgagcct ataatgaatc  1080

tgaacatcac tgggacatgg ttagacgcca tctataagga aaagaagata atcttacctt  1140

agatatttct aaattgaaag aacaaatttt tgaaacatca aaagcccagt taaatctggt  1200

gtcagaaacg gaggcaatgg taaaagctgt tgacagcctc acaaatctta accctgtcac  1260

ttgggttaaa accattggaa attccactat tgcaaatttt gtattaattc ttgtatgtct  1320

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<210> 15

<211> 1955

<212> DNA

<213> Homo sapiens

<400> 15

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<210> 16

<211> 2723

<212> DNA

<213> Homo sapiens


<400> 16

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<211> 2269

<212> DNA

<213> Homo sapiens

<400> 17

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<210> 18

<211> 1944

<212> DNA

<213> Homo sapiens

<400> 18

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<210> 19

<211> 2343

<212> DNA

<213> Homo sapiens

<400> 19

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| gcaacgtggc | aggatcctgt | ctctacaaaa | aataaaagta | aaaaaattat | ctgagtgtga | 720 |
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<211> 2166

<212> DNA

<213> Homo sapiens


<400> 25

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<211> 3120

<212> DNA

<213> Homo sapiens


<400> 26

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<211> 1671

<212> DNA

<213> Homo sapiens


<400> 27

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<210> 28

<211> 2148

<212> DNA

<213> Homo sapiens


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<210> 29

<211> 2011

<212> DNA

<213> Homo sapiens


<400> 29

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<211> 2024

<212> DNA

<213> Homo sapiens

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<210> 31

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 31

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<212> DNA

<213> Homo sapiens


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<210> 33

<211> 1831

<212> DNA

<213> Homo sapiens


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<210> 34

<211> 2742

<212> DNA

<213> Homo sapiens


<400> 34

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<211> 1463

<212> DNA

<213> Homo sapiens


<400> 35

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<210> 36

<211> 1969

<212> DNA

<213> Homo sapiens


<400> 36

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tcaggaggct gagacaggag aatggcgtga acccaggaga tggagcttgc agtgagccaa   1920

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<211> 2735

<212> DNA

<213> Homo sapiens

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| tctgcatggt | tttggtgctg | cttcttcaga | attctgtgtt | agctgaagat | ggggaagtaa | 180 |
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| acatagggcc | gaagtttatt | caagttggag | tggttcaata | tagtgactac | cctgtgctgg | 360 |
| agattcctct | cggaagctat | gattcaggag | aacatttgac | ggcagcagtg | gaatccatac | 420 |
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<211> 2493

<212> DNA

<213> Homo sapiens

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acagaaaggg aaaataaact gactttata atg 2493

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<211> 2015

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens


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<211> 2052

<212> DNA

<213> Homo sapiens


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<211> 3317

<212> DNA

<213> Homo sapiens


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<210> 43

<211> 1749

<212> DNA

<213> Homo sapiens


<400> 43

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<210> 44

<211> 2268

<212> DNA

<213> Homo sapiens


<400> 44

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aaatgaacca agcttgacca acaaacaaga cagccatttg ttcactcaga tctagccgag      180

gtaactcaca agtgcacctt gagatcctcc atgtgtctgt caacagcgat aggcaggatc      240

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gaaggtaaca tttttgactc gctcattggt ggaaatgcct ctgctgaagg ccctgagggc      540

aaaggtaccg aaagcacagt aatcactggt gtcgatagtg tcatgaatca tcacctgcaa      600

gaaacaagct tcacaaaaga agcctacaat aagtgcatca agattacat gaaatcaatc      660

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gaacagatca agcacatcct tgctaatttc aaaaactacc agaaaacatg aatccagatg      780

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ttttagaaaa acatgtcatg taggttgtct aaaagtaaaa tgcatttaaa cttaaaaaaa     1080

aatacctgag actgggtaat ttagaaaaac aatagatttc tttatcttgt ggttctatag     1140

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<210> 45

<211> 1884

<212> DNA

<213> Homo sapiens


<400> 45

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accaccgact ggcgcatctt gtccggcaag gggtccgggg gctcggcccg ggctgtctcc     180
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ggagggaagg agaggggaga aggcagaaac cttgagtctg cagtacagac gcaggagaag　960

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ggccagctct aggaaaccac acag　1884

<210> 46

<211> 1570

<212> DNA

<213> Homo sapiens

<400> 46

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gtaatagaaa agtataaagt aatgatccct tttttctctt tcagtaacat ggcagaattt    1140

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<210> 47

<211> 1667

<212> DNA

<213> Homo sapiens


<400> 47

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ccaaccatgg atcacaggtt aatcaactcc caattgtaat ggtctgtgtt tacttttcac   180

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<210> 48

<211> 2189

<212> DNA

<213> Homo sapiens

<400> 48

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ctgggagtct tagagagacc aaacagaata taactataat gttacaatgt attctactca　180

gaagagcctg tccatggcca cagttgcctt tactgtggat tgataatacc tttaacactt　240

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ccttaacaat agtaatggat gaggaaggca aactctgttg tcttcacaaa ccaggtggta　1980

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aagttaaaaa actgatggat gaagtaatta agagtatgaa acccaaataa acagccacca　2100

cattttcaaa acagatttgt aaaaattgta tttgttaaca ctgtgcacaa acgttttata　2160

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<211> 2223

<212> DNA

<213> Homo sapiens


<400> 49

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ctc 2223

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<211> 2206

<212> DNA

<213> Homo sapiens

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<212> DNA

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<212> DNA

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<211> 2215

<212> DNA

<213> Homo sapiens

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| ccttcctcgg | agttggccag | cagcagcaca | gacagctcag | gcaccagctc | agagggagag | 1500 |
| gatgacagca | cactggagct | ccttgcaccc | aagtcccgca | gccccagtcc | tggcaagtcc | 1560 |
| aagcgacacc | gcagccgcag | cccggggactg | gccaggttcc | ctgggcttgc | cctacggccc | 1620 |

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gaggccctgg cgcccaacag cctgtctcct agtccccagg gccatcgggg gctggaggaa  1920

gggggcctgg ggccctgagg gtggggtagg cagatgggcc aaggtgacca ccattctgcc  1980

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gcctctctgt cctggccagg ggtggacaac tggggtcccc caaaactcag tcctggcacc  2100

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<210> 55

<211> 2221

<212> DNA

<213> Homo sapiens


<400> 55

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acacacctgt aatcccagct gctcgggagg ctgaggctgg agaatcgctt gagcctggta   180

ggtggaggtt gcagtgagcc ggggtcatgc cactgcactc cagcctgggc acgcagagtg   240

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tttttgttt cataatacaa ggaagtaagt cctctctaac cctctttccg aaaaagctga    360

ctagtatctc aaaaccactt aattttgtat tactttcttt gggactttgg aagttgcata   420

agacatacag gttaacttgt aaagaatatc tttccagaat atgggttgcc aaatttttac   480

tagattcatt tagggtattt tttgtgagga tactgtattc ttgggcattt tgttcttttt   540

aattcctttt atgagtatac actctctgat tgtcttttct tatttcgcac ccagattttc   600

tgcagtagct cagtggaata ttttgagctt agtgtaagat agaccgtttg taaataaatg   660
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accagacgag ctacctaaga acagctaaaa gagcacaccc gtctatgtag caaaatagtg   960

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<210> 56

<211> 2007

<212> DNA

<213> Homo sapiens


<400> 56

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| ccttgccctg | ccctgcccag | atgttgacaa | cgtcacccat | tcccgccacc | agcagtcccc | 120 |
| tctgggagaa | ggccaggtgc | cctgctccat | ggggcagggt | ccgagtgctc | agaggctggt | 180 |
| acgtccctcg | caagtcaaag | atcttcagct | ggtggtctag | gccagaggtg | gccatgtacc | 240 |
| tggtgagaga | agagggatca | attaatatgt | cagtaaatgg | gtttaccaag | caagctgtgg | 300 |
| ccaagtccag | gcatcaagtc | tggctgggga | gaaaaagatt | aatagtaata | accactgcca | 360 |
| tcaccctgaa | cactccacag | gcatcctctc | agttaagctg | cacacaactc | atactatttt | 420 |
| tatttccctt | taagaggtga | ggaaactgaa | gctcagggaa | aggaaagcta | ggtcagtgaa | 480 |
| tggtcaggcc | tgtctcttta | gcatctgcct | ctaacctgct | aacaccacac | agccctctca | 540 |
| agacacgggc | gtcaaaagga | acgcccacac | gacaggctgc | acccaaatgt | gatgtccccc | 600 |
| tgtacacaca | tgcagcacac | agcccagcaa | ggggaaggag | catgtgcagt | ggtcagaaag | 660 |
| gcttcatggg | aaaggtggga | tttgagccat | tctagataat | tctcaaaaaa | ttacaggaag | 720 |
| tagatacaca | gcaggttcaa | atgcattaac | accagagtgt | tgagactgag | agggaagcag | 780 |
| aggtttgtta | ggattggtgg | gaaacatggt | caggaaaatc | aggagcagac | aatttgtgag | 840 |
| gtttctttaa | agtcagactg | aggacccaca | gctcatgatc | ccaacattgc | tctctggcag | 900 |
| tgacaaatca | caaagtgaag | gctccaagga | cttgagaaga | cctactcagg | gaagtggtga | 960 |
| agtaatgcac | tggaggccct | tgccctgccc | ctctgtgtgc | tttccctgga | aggaaggagg | 1020 |
| gaaggttggt | gaccaaatcc | tctccaggaa | tcatgtactg | cataagttgt | ttactttcag | 1080 |
| aagttggagt | tccttttctt | tttttgagac | ggggtctctc | tgttgcccag | gctggagtgc | 1140 |
| agtggcatga | ccctggctca | ctgcagcctc | tgcctccctg | gttcaggtga | ttctcgtgcc | 1200 |
| tcggcctccc | gggtagctgg | gattacaggc | atgcgccacc | accgctaatt | tttggtggag | 1260 |
| ccggggtttc | gccatgttga | ccacgctggt | cttgaactcc | tggcctcaaa | tgacctgccc | 1320 |
| accttggcct | cccagcatcc | tggagacttt | gaataagctg | gtggccaagc | tggatgtggt | 1380 |

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<210> 57

<211> 2886

<212> DNA

<213> Homo sapiens


<400> 57

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cagtggcacg atcatggctc acttgcttgg ccttgacttc ccaggctcaa gcaatcctct 240

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attgcccagc tagcaaagac tgacctaata agcagggcaa acactgtcaa aactctagta 480

taaagttgcc tctgtgtgct ttatcggaat cctcttgttt taatcctctc ctggtacgtc 540

tccatcccat cttagagtgt taagtgcaga gtcccttcgg aagcttaagt ctttgtggct 600

gccagagtca gaatgacgtg acgagcagag ggaggctttg gaattgaagt tttcattcac          660

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<210> 58

<211> 2289

<212> DNA

<213> Homo sapiens

<400> 58

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<210> 59

<211> 2404

<212> DNA

<213> Homo sapiens


<400> 59

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agcc 2404

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<213> Homo sapiens


<400> 92

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<213> Homo sapiens

<400> 105

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<211> 3820

<212> DNA

<213> Homo sapiens

<400> 106

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<211> 3745

<212> DNA

<213> Homo sapiens


<400> 107

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<211> 3599

<212> DNA

<213> Homo sapiens


<400> 108

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<211> 3972

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<213> Homo sapiens


<400> 113

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<211> 4632

<212> DNA

<213> Homo sapiens

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<400> 115

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<212> DNA

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tccgagatct ttgtcagcca gaaggacctg gtgggcatcg ttcccttggc tatggacact    180
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<211> 3274

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<213> Homo sapiens


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<211> 3349

<212> DNA

<213> Homo sapiens


<400> 149

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<213> Homo sapiens

<400> 154

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<213> Homo sapiens


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<210> 233

<211> 2080

<212> DNA

<213> Homo sapiens


<400> 233

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ccatggcttt atcgagctgg gctcagggaa caagctgggc tgcaaagggt ttttccagat   420

ccttctcttt ggctgagttc tcattgttaa agccacgcgc tggatcctgc aggacccagg   480

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<210> 234

<211> 2388

<212> DNA

<213> Homo sapiens

<400> 234

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<210> 235

<211> 1577

<212> DNA

<213> Homo sapiens


<400> 235

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ggtttcgagg cggctggcag ccgcccccccc accccatgcc ctttgggtgg cacctgtgct    300
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gatggccttg gccatgggca cgtccctatc agacaaggac attgagctgc tgcccacgga 840

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● ggccagccaa ggggctccca tggggtaacc ggggtgacca cgcacctggg cagaagccgt 1500

tggggccggt aagaggcggc agccgtgagg gtggacccag cttttgaagg aaaatggaag 1560

aaaagcagca ttaagtg 1577

<210> 236

<211> 1881

<212> DNA

<213> Homo sapiens

<400> 236

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| tgctcgagac | tccgacttcg | gtcttgcggc | gcgctcgcgc | ccgcgggcca | tgccccactg | 120 |
| actctaagtg | ggcactgccc | cggctccggg | agggcgagac | cgagcgccgg | ccatgggaag | 180 |
| cttccagctg | gaagactttg | cggcgggctg | gatcggaggt | gcagccagtg | tcatcgtcgg | 240 |
| ccaccctctg | gacacagtca | agactcgcct | gcaggctggc | gttggctacg | gaaacaccct | 300 |
| cagctgcatc | cgcgtggtgt | acaggaggga | gagtatgttc | ggcttcttca | agggcatgtc | 360 |
| cttccccctc | gccagcattg | ccgtctacaa | ctccgtggtg | tttggggtct | tcagtaacac | 420 |
| gcagcggttc | ctcagccagc | accgctgcgg | ggagccagag | gccagtcctc | cccgcacgct | 480 |
| gtcagacctg | ctcctggcca | gcatggtggc | cggcgtggtc | tctgtcgggc | tgggagggcc | 540 |
| cgtggacctc | atcaagatcc | ggttgcagat | gcagacacaa | ccgtttcggg | acgccaacct | 600 |
| cggtttgaag | tccagggcag | tggctcctgc | ggagcagcca | gcataccagg | ggccagtgca | 660 |
| ctgcattaca | accattgtga | ggaatgaggg | cctggcgggg | ctataccggg | gggccagtgc | 720 |
| catgctgctg | agggatgtcc | caggctattg | cctctacttc | atcccctacg | tgttcctgag | 780 |
| tgagtggatc | acacctgagg | cctgcacagg | ccccagcccc | tgtgccgtgt | ggctggcggg | 840 |
| cggcatggca | ggtaagggca | gcagcagctg | gagccgcacc | cctgtgcagg | ccacagcagt | 900 |
| gggacagctg | gggaactgcc | atgcccttct | cagcccaggg | ggagggcagg | acacatttag | 960 |
| gtactcaccc | aacaattctt | tgttaggtac | ctactctgtc | cccggccctc | tcccacctca | 1020 |
| gtctcatccc | ttccctatgc | agctatgaga | atggcagttc | ccatttgact | ttcaggcaac | 1080 |
| agatatattt | tgaacacata | ctctgtgtca | ggcattacta | agctttggaa | aggaaatcca | 1140 |
| ttatcatggt | tcagtttatt | aaatgcaatc | tttgtaatgt | aaggatgcca | ttagttctac | 1200 |
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| tagccaatcc | caggtcatac | agctggagct | gacagtatag | cagggactct | gcagtcagaa | 1320 |
| agatttaagt | tcaaatccac | acttcatcat | tttgtgacca | tggacttgtt | gcttaacctc | 1380 |
| cctgctcaga | atcctgcacc | acatccttct | ttcatttaag | gtaaaagttg | atatctttgc | 1440 |
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| ggcccttccc | tgaccacagg | gcctttgtac | ctgctactca | ccacctcctg | aatttaacaa | 1620 |
| cgtggagacc | actggggatt | ttggcaaggg | ccatttgatg | gagagaaggg | tgtaaaaacc | 1680 |

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<210> 237

<211> 2396

<212> DNA

<213> Homo sapiens

<400> 237

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<210> 238

<211> 1882

<212> DNA

<213> Homo sapiens

<400> 238

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<211> 2511

<212> DNA

<213> Homo sapiens


<400> 239

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<213> Homo sapiens


<400> 240

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<211> 1927

<212> DNA

<213> Homo sapiens


<400> 241

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<212> DNA

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<213> Homo sapiens

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<213> Homo sapiens


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<212> DNA

<213> Homo sapiens


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| gccagccagc | ttgccaaagg | aatctttcct | gtgcacagag | agcacactgg | gcttggagac | 240 |
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| ctctctcaga | ccgtggcacc | aaggaacctg | ctgctaccct | acttgatggg | gctgaacagg | 360 |
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<211> 2483

<212> DNA

<213> Homo sapiens


<400> 253

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atcacgcacc gcagcaatgt ccagcggcag cagatccggc agaccttcaa gtctcacttt  1440

ggccgggact aatgactga cctgaagtct gagatctctg gagacctggc aaggctgatt  1500

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tttgtggcca ttgttcaaag tgtcaagaac aagcctctct tctttgccga caaactttac   2040

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<210> 256

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 256

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aatgcacatg tgctgtctgt gtctgggtgg gtttgtgttc aggttcttgg gtggggtaac    180

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<210> 257

<211> 3201

<212> DNA

<213> Homo sapiens


<400> 257

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●

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<210> 258

<211> 2189

<212> DNA

<213> Homo sapiens


<400> 258

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<211> 2050

<212> DNA

<213> Homo sapiens


<400> 259

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<211> 3318

<212> DNA

<213> Homo sapiens

<400> 260

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<213> Homo sapiens

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<211> 3978

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<212> DNA

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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens


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<211> 3388

<212> DNA

<213> Homo sapiens

<400> 333

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<211> 3392

<212> DNA

<213> Homo sapiens


<400> 334

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<210> 335

<211> 4088

<212> DNA

<213> Homo sapiens


<400> 335

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<211> 3921

<212> DNA

<213> Homo sapiens


<400> 360

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<212> DNA

<213> Homo sapiens


<400> 361

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<211> 4592

<212> DNA

<213> Homo sapiens


<400> 362

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<211> 3431

<212> DNA

<213> Homo sapiens


<400> 375

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<211> 4336

<212> DNA

<213> Homo sapiens


<400> 376

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cagaccgtgt tccatgaagc acaaagaaag tcccccaagt aatgccactg cagaaaccga  240

gcctatccca cagaaattgc aaatgcctcc ttgctctgaa tgtgaggtga aaaaagcccc  300

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<210> 377

<211> 3360

<212> DNA

<213> Homo sapiens


<400> 377

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<210> 378

<211> 3995

<212> DNA

<213> Homo sapiens

<400> 378

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<400> 384

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